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CDC 64550

INVENTORY MANAGEMENT SPECIALIST

(AFSC 64550)

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Volume 3

Operational and Customer Support

Extension Course Institute
Air University

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Preface

IN THIS THIRD volume of CDC 64550, *Inventory Management Specialist,* the material is designed to increase your knowledge of the duties and tasks performed in Demand Processing, Repair Cycle Support, Mission Support, Research, Records Maintenance, Materiel Control, and Bench Stock Support. The six chapters in this volume give you a working knowledge of inventory management from the specialist's point of view.

Code numbers appearing on figures are for preparing agency identification only.

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CHAPTER 1

Demand Processing Unit and Mission Support Section

YOU HAVE PROBABLY heard the saying, "You can't fly without supply." This saying is particularly true of the material covered in this chapter. Base Supply is one of the most important activities on any base and is a major support organization. Every organization on an Air Force base must get supplies from this activity. Its inventory is composed of everything from scotch tape to aircraft parts. Within the Standard Base Supply System (SBSS), the demand processing unit holds a ranking position of importance. The mission support section works very closely with this unit. Each issue request that is verified as mission capability (MICAP) is sent to this unit. They need a good relationship to ensure that maximum customer support is achieved.

1-1. Demand Processing Unit

The demand processing unit (DPU) acts as the primary—though not the only—point of submission for requests of supplies. For this reason, DPU is sometimes called the heartbeat of Base Supply. The duties and responsibilities of the various activities in Base Supply were discussed in Volume 1 of this CDC. This section tells you again about some of the duties and responsibilities of the DPU. The primary objective of the DPU is to issue supplies to using organizations in a timely manner. Accomplishing this objective involves the following duties and responsibilities.

a. Act as the primary point for submission and preparation of requests for issue of supply items.

b. Exercise quality control over all requests prepared or processed. It is essential that inputs are accurate to stop the generation of excessive levels, wrong transactions, unnecessary workloads, etc. (i.e., N versus R demand code, quantity).

c. Maintain a suspense system to ensure the timely processing of all inputs.

d. Begin verification of killed requests for appropriate urgency of need A and B requests.

400. State how issue requests are received through the demand processing unit, based upon their delivery priority.

Receipt of Issue Requests. The majority of requests for expendable items are submitted to DPU, with the exception of items stocked in the base service store (BSS), individual equipment unit (IEU), on a supply point, or on bench stock. This single point of submission is established to receive both routine and expedite (priority) requests. Depending on the urgency of need designator (UND) and locally established communication facilities, requests for supplies may be hand-carried, mailed, or transmitted by radio, telephone, intercom, teletype, or terminal.

The demand processing unit uses established procedures to expedite all call-in requests. These procedures are based on the methods of submission and the preparation and processing of AF Form 2005, Issue/Turn-In Request.

Organizations submit requests to Base Supply using a national stock number (NSN) or a part number. When part numbers are used, technical order (TO) data or other appropriate references must be furnished at the time of submission unless the part number is known to be loaded. Quick-reference numbers may be used for call-ins at the option of the major command (MAJCOM).

Requests for issues are submitted to one of the following central points (fig. 1-1).

a. Demand processing unit (supplies).
(1) Expedite call-in point (delivery priorities 01–04).
(2) Routine call-in point (delivery priorities 05–07).
b. Bench stock support section.
c. Supply point.
d. Individual equipment.
e. Equipment management section.
f. Retail sales section (base service store/tool issue center).

Exercises (400):

1. Requests for supplies may be submitted by what methods?

2. When a request is submitted for a part numbered item, what must be furnished if the part number is not known to be loaded?

3. Where should you call in issue requests with delivery priorities other than 01–04?

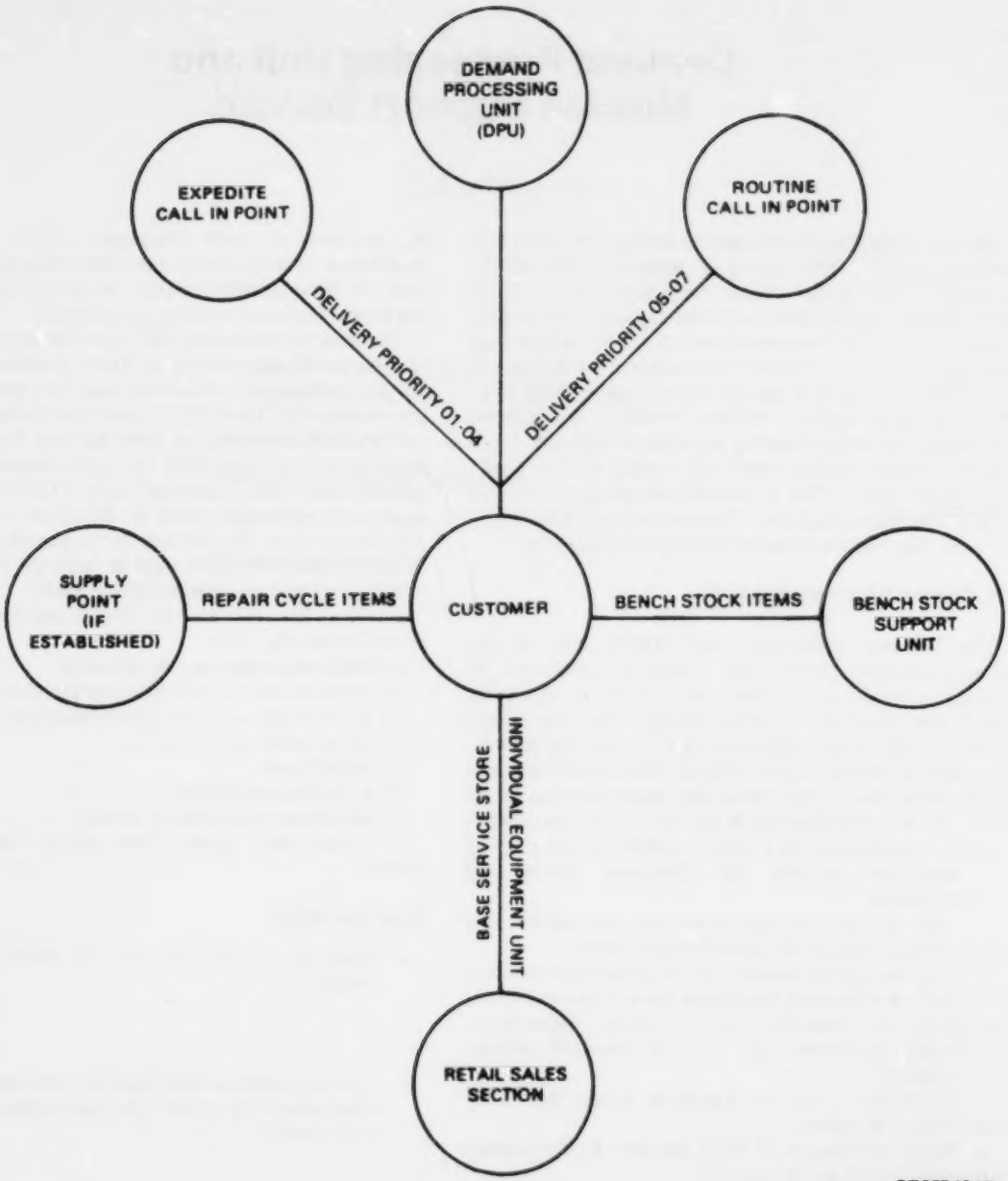

Figure 1–1. Points of submission for supply requests.

401. State the procedures for preparing an issue request.

Preparing an issue request is one of the most important duties performed by the demand processing unit. This is the initial point where all issue requests are prepared and processed through the supply system. Upon receipt of a valid demand for supply items, the appropriate point of submission prepares an AF Form 2005 in two copies. Copy two of each AF Form 2005 is kept by the point of submission for use as a control register to determine the next available document serial number. Preserial-numbered AF Forms 2005 may be used instead of copy two for determining the next available serial number. Copy one is sent to the terminal for input or to the punch card accounting machine (PCAM) unit for keypunching. Copy two is used to control the original copy if it leaves the unit (i.e., PCAM unit, research unit, mission support section).

Data Elements and Codes. Before we discuss the data elements and codes used on issue requests, let's discuss taking call-ins. If you are assigned to take call-ins, ensure that you're familiar with the phonetic alphabet (i.e., A-alpha, B-bravo, C-Charlie, etc.). It is very important that you get the information correct the first time, because it may be difficult to find the caller on a return call. An incorrect issue request may be worse than no issue request at all. Also, make sure that you check the handwritten issue request for accuracy before it is processed.

Instructions for preparing an issue request are contained in AFM 67–1, *USAF Supply Manual,* Volume 2, Part 2. This publication identifies the entries to be made, conditions, variations, and exceptions for the use of data elements and codes. The entries in blocks A through J are self-explanatory. When you take information over the phone and the customer has only the part number of the item, be sure to get the technical order number or other reference required in block E. The data elements and codes that are entered in card columns (cc) 1–80 must be accurate and valid and must reflect the information furnished by the requester. Each worker assigned to a call-in point must have a thorough knowledge of these data elements and codes and understand when and why they are used. Refer to figure 1-2 while reading the description of the codes and elements used to fill out an issue request on an AF Form 2005. Some of the codes discussed do not have to be used, however, you should be familiar with them.

Transaction identification code (TRIC). This three-digit alpha/numeric code provides a method for the SBSS Data Base to select the correct internal program to process the input transaction. The TRIC ISU used in figure 1-2 tells the SBSS Data Base to select the issue program for processing the input. Refer to AFM 67–1, Volume 2, Part 2, Chapter 3, for a list of TRIC codes.

Delivery destination code. This is a locally assigned three-digit alpha/numeric code that indicates the location to which the property is to be delivered. If this code is left blank on the AF Form 2005, it is assigned from the organization cost center record (OCCR) upon input to the S1100/60.

Issue exception code (IEX). This one-digit alpha/numeric code is assigned to the Item Record and identifies conditions peculiar to an item, controls the issue of certain items (i.e., 3–BSS item, 4-post-post random length item, etc.), ensures that limited stocks are used to the best advantage, retains in a stand-by position certain items needed for a specific purpose, and advises that certain transactions have been processed. Refer to AFM 67–1, Volume 2, Part 2, Chapter 8, for IEX codes.

Stock number, part number, unit of issue, and quantity. These elements are supplied by the customer making the request and are self-explanatory. This does not mean that you can take for granted that the information is correct. When in doubt, check it. An incorrect stock number causes the input to reject. Part numbers requests contain a T in cc 8, followed by the fourteen most significant characters of the part numbers. If the stock number or part number is not loaded on the item record, the request is sent to the research unit for processing. An incorrect unit of issue also causes an input to reject. Quantities should be reasonable; when they are not, they should be questioned. You must ensure that if a unit of issue is changed, the quantity is verified. For example, if an activity requests 100 each (ea) bolts and, the correct unit of issue is hundred (hd), you should change the quantity from 100 to 1. The activity may need 100 bolts, but not 10,000 bolts.

Document number. A 14-digit alpha/numeric document number is assigned as a control and/or reference number to identify the document. Refer to figure 1-3 for the format and construction of a document number.

Demand code. This is a one-digit alpha code used on issue requests to indicate how to accumulate demand data for stock leveling and due-in from maintenance (DIFM) control.

Demand codes I, J, K, L, and M identify initial issue requests for items needed to satisfy an original shortage/installation or a later loss to an originally installed item. No turn-in of an unserviceable item is involved. Initial requests are not considered as demands against Supply, so demand data on the Item Record is not updated and DIFM control is not established.

Demand code C (contractor support) identifies a request from a contractor for items needed in support of authorized contracts. This code is only used when it is anticipated that a like item will not be returned. Contractor support issues do not update the Item Record demand data. DIFM control is not established for this demand code.

Demand codes R and T (recurring issue) identify a request to replace a like item that is suspected to be or is actually unserviceable, or one that is condemned. This is the type of issue request processed most frequently by maintenance shops. Recurring requests include day-to-day issues to maintenance for normal operations. A recurring request updates the Item Record date of first demand (DOFD); if blank, date of last demand (DOLD), number of demands, and cumulative recurring demands. This demand code establishes DIFM control and records repair cycle data on the Repair Cycle Record when the removed item is returned from Maintenance.

Demand codes N and U (nonrecurring issue) identify a request for which there is no anticipated future need for the item. Nonrecurring demands are not considered as demands

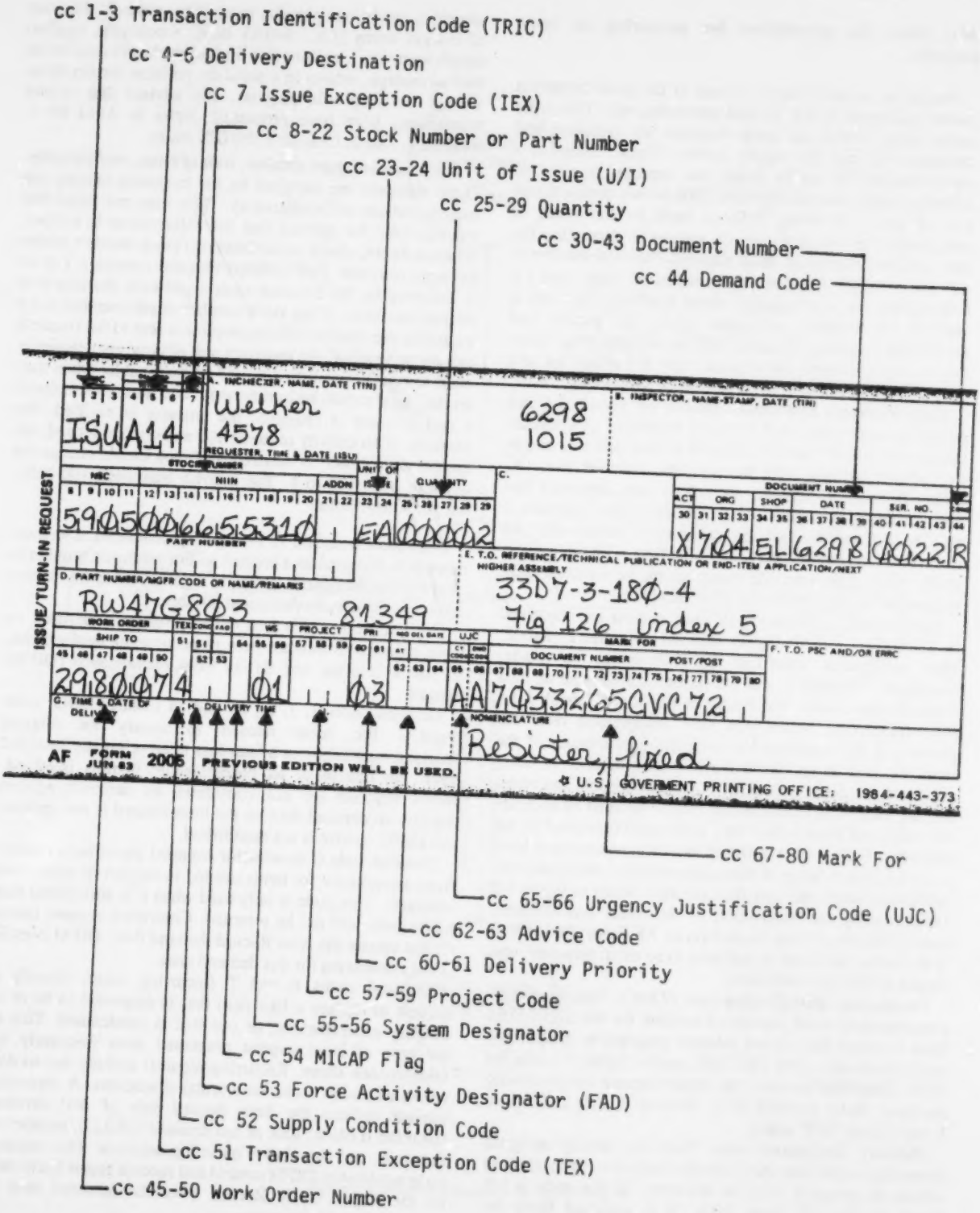

Figure 1–2. Prepared issue request, AF Form 2005.

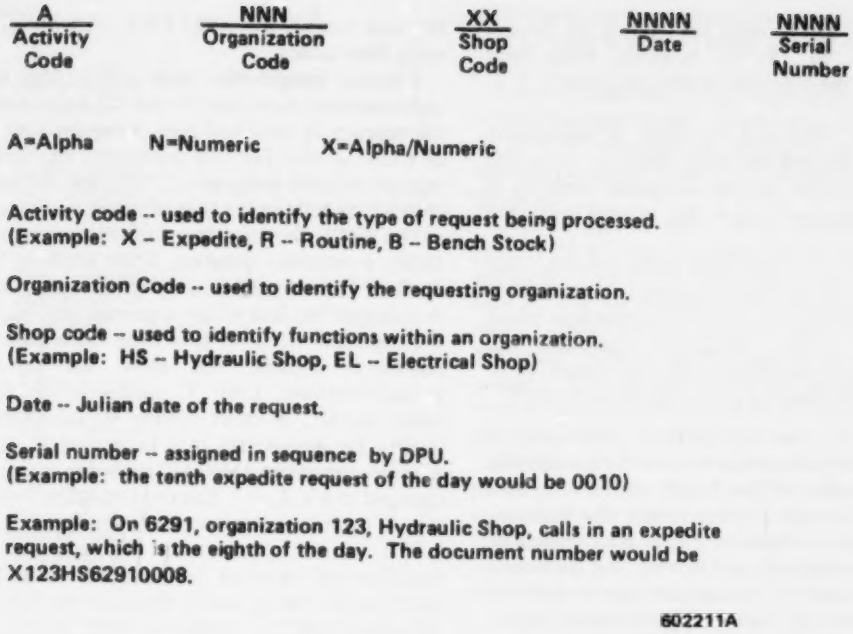
A
Activity Code
NNN
Organization Code
XX
Shop Code
NNNN
Date
NNNN
Serial Number
A=Alpha N=Numeric X=Alpha/Numeric
Activity code -- used to identify the type of request being processed. (Example: X -- Expedite, R -- Routine, B -- Bench Stock)
Organization Code -- used to identify the requesting organization.
Shop code -- used to identify functions within an organization. (Example: HS -- Hydraulic Shop, EL -- Electrical Shop)
Date -- Julian date of the request.
Serial number -- assigned in sequence by DPU. (Example: the tenth expedite request of the day would be 0010)
Example: On 6291, organization 123, Hydraulic Shop, calls in an expedite request, which is the eighth of the day. The document number would be X123HS62910008.
602211A

Figure 1–3. Construction of a document number.

against Supply, therefore, demand data is not updated on the Item Record. These demand codes establish DIFM control, but do not record repair cycle data on the Repair Cycle Record. Nonrecurring requests include items issued to perform modification, replace items in kits with a newer item, retrofit, and requests for nonregularly scheduled transcient aircraft support when the items requested are not common to the system supported by the base. These codes are also used to issue items to supply points, MSK (mission support kit), and WRSK (war readiness spares kit) details. DIFM control and repair cycle data do not apply to these types of issues.

Requesting activity personnel normally assign the demand code, as they know how the items are going to be used. However, you must check the accuracy of the demand code when you perform quality control. Remember, it is a functional responsibility of the demand processing unit to exercise quality control over all prepared and processed documents. The need for this code to be accurate cannot be overemphasized. It affects the validity of item records, stock control levels, repair cycle records, and DIFM control. Detailed procedures for repair cycle control and DIFM control are covered in a later chapter.

Work order or job control number. The work order number must be entered in cc 45–50 for civil engineer requests. A vehicle maintenance work order number and charge code are entered on issues for vehicle maintenance organizations that operate under the S1100/60 Vehicle Integrated Management System (VIMS). For items with a standard reporting designator (SRD) that is tracked by MMICS (maintenance management information control system), the last six-digits of the seven-digit job control number (JCN) is entered.

Transaction exception code (TEX). This is a one-digit aipha/numeric code that is used on inputs for program identification of exception conditions that require special processing procedures. There are many different codes and each has a specific function. A TEX code 4 on an issue request notifies the S1100/60 to fill or kill the request. A TEX code 8 on an issue request notifies the S1100/60 not to issue an item but to establish a due-out. As you can see, extreme care must be taken when TEX codes are assigned to any input. TEX codes do not always mean the same thing, so it is important to use the right one. For instance, a TEX 4 with TRIC ISU indicates a fill or kill condition where as a TEX 4 with TRIC TIN indicates a post-post turn-in with the due-out document number in cc 67–80. For more information on TEX codes, refer to AFM 67–1, Volume 2, Part 2, Chapter 3.

Supply condition code. This is a one-digit alpha code that tells whether the property is serviceable or unserviceable (i.e., A is serviceable, F is unserviceable/reparable, and H is unserviceable/condemned). The codes can be found in AFM 67–1, Volume 2, Part 2, Chapter 3.

Force activity designator (FAD). This is a one-digit numeric code entered on the issue request to show the relative order of importance that the organization holds in the overall Air Force mission. Normally the FAD code is left off the issue request as it is on the OCCR. If the organization is supporting a project or other organization with a higher FAD, they can use the higher FAD code on

their issue request. FAD codes are shown as Roman numerals (i.e., I, II, III, IV, V), however, when input through the terminal, the codes are Arabic numbers (1, 2, 3, 4, 5).

System designator. This is a two-digit, alpha/numeric code used to identify the end use of an item to a designated weapon or support system. System designator code 01 is used to identify operational assets that are not restricted otherwise.

Project code. This is a three-digit alpha/numeric code used to identify requisitions and associated documents of intra/inter service performance and tracking cost data which pertains to special projects, programs, exercises, and maneuvers. Only approved project codes are entered in cc 57–59. Locally assigned codes are not entered by the DPU.

Delivery priority. This one-digit numeric code is entered on the issue request to indicate the maximum time allowed from receipt of the request in Base Supply until on-the-shelf items (onhand) are delivered to the requester. For example, if the item requested is for repair of a tactical air vehicle on alert status, delivery priority code 1 is used, and the item is delivered as soon as possible, but not later than 30 minutes. For a nontactical aircraft undergoing extensive repair, delivery priority 5 applies, and the specific time frame to deliver the item is 8 hours. These delivery priority codes range from 1 through 7, and supply delivery times run from 30 minutes to 24 hours. If the item is not in stock, it must be requisitioned.

The customer determines the method and point of submission to use. For example, a customer who needs an item within 30 minutes makes the request to the expedite call-in point by the fastest means of communication available and assigns delivery priority 1 or 2 to the request. This allows 30 minutes in which to process the request and deliver the item. There are times when supply customers have urgent needs that must be processed within short periods of time. However, an excessive number of this type of request requires numerous workhours to handle. Further, it is not normal to have that many urgent requests because maintenance activities should, with few exceptions, anticipate their requirements and process them as routine requests. Any time you think that the number of priority requests is excessive, you should find out why by calling Materiel Control for maintenance requests or the requester for other types of requests.

Advice code. This two-digit alpha/numeric code is used to give the source of supply coded instructions that a specific condition exists and is considered to be essential to the desired supply action. Advice codes only apply when the request is sent to a source of supply. They do not apply to requests that are filled by onbase assets. For example, if the AGE shop needs 5 feet of continuous tubing, they may not be able to perform their job with five separate 1-foot lengths. If advice code 2N is used, the source of supply will know that a continuous length is needed. You're probably wondering what happens if the tubing is available on base but in separate lengths. This is when a TEX code would be used. If TEX code 8 is used, the onhand balance is bypassed and a due-out is established. This is just one of many situations where the use of more than one code is needed. For best results, use AFM 67–1, Volume 2, Part 2 when using these codes.

Urgency justification code (UJC). This is a two-digit alpha/numeric code used on the AF Form 2005 to indicate the urgency of need and type of requirement. An example of a UJC is AA. The first position of this code reflects the urgency of need designator (UND), and the second position of this code reflects the type of requirement (justification).

The UND identifies how urgently an item is needed to satisfy a particular situation. There are three basic codes—A, B, or C—assigned to identify the urgency of need. UND A indicates that lack of the requested item prevents mission accomplishment; UND B is used when a lack of the item requested impairs, but does not prevent mission accomplishment; UND C means stock replenishment, initial lay-ins, or other routine requirements that do not qualify for assignment of a higher UND. If a reportable mission capability (MICAP) situation exists, UND A is changed to a 1, J, or /. The code assigned depends upon the type of equipment/aerospace vehicle requiring the parts.

The second position is the type of requirement (justification) for which the requested materiel is needed. In our example, the second A represents an aerospace vehicle anticipated MICAP. Different codes are assigned to each piece of equipment or aerospace vehicle. If the type of justification code is F, a vehicle is deadlined inoperative for parts.

Mark for. The "mark for" field identifies how or what the item is going to be used for or against. Mark for fields vary according to the type of issue (i.e., maintenance, civil engineer, awaiting parts, etc.). For example, figure 1-2 reflects an issue to a maintenance organization, 7033265CVC72. Card columns (cc) 67–73 reflect the serial number of the end item. The standard reporting designator (SRD) is reflected in cc 74–76 and the first two positions of the work unit code (WUC) are shown in cc 77–78. The MAJCOM that owns the end item being repaired is shown in cc 79–80 if it is different from the requesting unit's command code.

Exercises (401):

1. Match each function in column A with the appropriate data element or code in column B.

Column A	*Column B*
—— (1) Provides a means for the SBSS Data Base to select the appropriate internal program.	a. TRIC.
—— (2) Used to indicate whether property is serviceable or unserviceable.	b. Delivery destination.
—— (3) Is a 14-digit alpha/numeric number used to identify a document.	c. Stock number, unit of issue, and quantity.
	d. Document number.
	e. Demand code.
	f. Transaction exception code (TEX).
	g. Supply condition code.
	h. System designator.
	i. Delivery priority.
	j. Urgency justification code (UJC).
	k. Issue exception code (IEX).

Column A *Column B*

____ (4) Used to indicate the urgency of need and type of requirement.

____ (5) Used to indicate the maximum time allowed from receipt of a request in Base Supply until delivery of on-the-shelf items to the requester.

____ (6) Used to indicate how to accumulate demand information for stock leveling and DIFM control.

____ (7) Tells location to which property is to be delivered.

____ (8) Tells how many items the customer requested.

____ (9) Contains a shop code used to identify the maintenance activity who requested the item.

____ (10) Identifies a request from a contractor for items needed to support an authorized contract.

____ (11) Identifies item records with peculiar issue conditions.

____ (12) Identifies exception conditions which require special processing procedures.

____ (13) Identifies the end use of an item to a designated weapon or support system.

____ (14) Requests that an item be processed and delivered in 30 minutes.

2. What methods are available for determining the next available serial number to use on an issue request?

402. State the procedures for processing issue requests and identify produced management notices.

Issue Processing. The next step is to process the completed issue request. Issue requests are processed based on their delivery priority, which allows Supply to meet the established time frame (i.e., delivery priority 02 is 30 minutes).

Routine call-in point. When routine requests (delivery priority 05–07) are processed, the routine call-in point does not have to advise the requester of supply action, with the exception of memo due-outs of repair cycle (DIFM) items. Memo due-outs are usually established to provide a document number against which bits and pieces can be ordered. Any request for advice of action taken does not have to be accepted prior to the expiration of the maximum authorized delivery time.

Expedite call-in point. Issue requests with a delivery priority 01–04 are processed through the expedite call-in point. Requests that contain a national stock number (NSN) or part number in CC8–22 are input through the terminal. If a terminal isn't available, the request is keypunched, verified, and input through the RPS/main card reader.

Any requests that seem to have an inflated UND/UJC may be questioned by the DPU. These challenges can effectively reduce the number of uniform materiel movement and issue priority system (UMMIPS) violations that occur and reduce the costs of priority requirements. The requester bears the ultimate authority and responsibility for the UND/UJC used. When the requester confirms that a priority is correct, the issue is processed as designated by the customer.

Verification process. Issue requests with UJC AO or AR and UND B (except UJC BQ) are considered as verified prior to receipt by the DPU. These types of requests are processed as fill or backorder if the input TEX code is blank. Requests with UND A, except AO and AR, and UJC BQ are processed as fill or kill if the input TEX code is blank. The DPU maintains a listing of individuals who are authorized to review and verify UND A and UJC BQ requests.

Upon finding that either the assets are not available (kill) or the Item Record isn't loaded (295 reject), the DPU and the requesting activity (Materiel Control for maintenance activities) begin a joint verification process. As a DPU clerk, you research the request to see if there are any interchangeable or substitute items, bench stock or supply point items, etc. As a materiel control clerk, you'll perform the same research, including repair capability, cannibalization action, availability of AWP (awaiting parts) assets, next higher assembly (NHA), local manufacture, etc. Once the requesting activity has performed all of their research, an authorized verifier contacts DPU and either confirms, upgrades, downgrades, or cancels the request. As a DPU clerk, you annotate the issue request with the verifier's name and the time of verification and then you take the appropriate action as requested.

Management Notices. Issue requests may be input at any terminal or the card reader. When the request is processed, one of several things can happen: the property is issued (filled), the issue is killed, the issue request rejects,

or a management notice is output. The following management notices are the most commonly produced.

I004. This notice is provided as a result of issue processing. It is not produced when the input and output terminals are the same. The I004 notice reflects the quantity issued, killed, or due-out; type of transaction (EAID (equipment authorization inventory data), DIFM, etc.); the warehouse location; ERRCD (expendability, recoverability, repairability cost designator) of the requested stock number; the current date; a notice that an issue was made from the requested stock number or an interchangeable/substitute group (ISG) stock number or from both the requested stock number and an ISG stock number; and provides the master bench stock detail if the item is authorized on the applicable organization's bench stock.

I005/I006. These notices reflect due-out and requisitioning action taken on the request and appear following the I004 notice on the same DD Form 1348–1, DD Single Line Item Release/Receipt Document. These notices appear only if a due-out has been established.

I023-OTHER ASSET DATA FOLLOWS. This notice reflects the total base asset position when an issue request is killed or backordered with a TEX code 7. This notice appears following the I004/I007 and/or the I005/I006 notice on the same DD Form 1348–1. Some of the data reflected on the I023 are detail records on all items coded M (master) or I (interchangeable) in the ISG, all NSNs with serviceable balances and in the requested ISG but not considered fully interchangeable, the accumulated due-out and due-in quantity for each NSN in the requested ISG, the percent of base repair on the master NSN in the ISG (DIFM requests only), etc.

I019. This notice reflects that the due-out quantity reflected in the I004 notice is killed due to lack of funds. This notice is provided when funds are not available for obligation when establishing due-out details. The I019 is printed immediately after the I004 notice.

I017. This notice is provided on all part number requests which cannot be converted into a NSN under program control. All part number details that are located are printed on this notice.

Exercises (402):

1. What determines the sequence for processing issue requests?

2. Issue requests with a delivery priority of 01–04 are handled by what call-in point?

3. By challenging possibly inflated UJCs/UNDs, what can occur?

4. What type of priority requests are considered as verified prior to receipt by DPU, and how are these requests processed if the input TEX code is blank?

5. What types of priority requests are processed as fill or kill if the input TEX code is blank?

6. What action is taken by DPU upon receipt of a kill notice?

7. What management notice reflects the quantity issued, killed, or due-out?

8. What management notice reflects due-out and requisitioning action taken on an issue request?

9. What management notice reflects the total base asset position for killed requests?

10. What management notice reflects that the due-out quantity reflected in the I004 management notice is killed due to lack of funds?

11. What management notice is provided for all part number requests which can't be converted into NSNs under program control?

403. Cite the procedures for post-post issue requests.

Post-Post Procedures. If you recall, post-post procedures were discussed in Volume 2, Chapter 1, of this CDC. Post-post procedures have a great impact on DPU. In order for DPU to function properly during post-post operations, it is essential that certain management products not normally maintained within this unit be made available to allow for continuity in processing. The COS may also wish to relocate personnel from other sections into Demand Processing or from Demand Processing to Storage and Issue to assist during post-post operations.

During the post-post period, the types of priority requests that are accepted and processed depend upon the phase declared by the COS. Requirements that are received but don't qualify for processing are held and input after recovery.

The AF Form 2005 is prepared and processed in the same manner as stated earlier with a few exceptions. Copy two of the AF Form 2005 is kept as the control copy and copy one is used to check the I&S Group Listing (R02) and Stock Number Directory (M14). In addition to the item requested, the warehouse location is obtained and the storage area is checked on all items in the I&S group. The I&S group code (M-master, I-interchangeable, S-substitute) is entered on the AF Form 2005 to ensure that issue and customer verification are like online issue and other asset notice concepts. If the requested Item Record has an IEX code, any needed exception processing is done *prior* to issuing the property.

DPU contacts the applicable warehouse for an asset availability check. All items in the ISG are checked until sufficient assets are found or they are verified as zero balance.

If an acceptable asset is available for issue, the AF Form 2005 is updated to reflect the NSN and a TEX code 6 (post-post). A DD Form 1348–1 (4 part) is prepared (handscribed or typed on the terminal function) in the proper format. If the ERRCD of the issued item is XD or XF, enter DIFM in block C. The originator of the DD Form 1348–1 enters POST POST and their name or initials in block BB and a TEX 6 in cc 51. Copy one of the AF Form 2005 is held in suspense. The DD Form 1348–1 is forwarded to the storage and issue section.

If an item is not available for issue, confirm the request with the requesting activity. Copy one of the AF Form 2005 for verified UND A and B requests is annotated with a TEX code 7 and is sent to the stock control section for off-line requisitioning. As a DPU clerk, you take the following action.

a. Annotate block I of copy two of the AF Form 2005 with a "D" to indicate a due-out will be established.

b. If the ERRCD of the item to be backordered is XD or XF, prepare a DD Form 1348–1 in the same manner as if the item issued, except change the TRIC code in cc 1–3 from ISU to DUO. Send copy two of the DUO to the repair cycle support section. Send copies three and four of the DUO to the production control unit (requesting activity) for controlling the DIFM asset.

If the requested item is not listed in the M14, it is treated as a 295 REJECT. An item record load (TRIC FIL) is prepared and must be processed prior to the issue request during the recovery process. If the requirement is cancelled, the person's name and the word CANCELLED is entered in block D of the AF Form 2005.

Routine issue requests may be accepted during any phase of post-post at the COS's option. Any request that is accepted but not processed is sent to the post-post control team (PPCT) for input after recovery. If the requests were externally verified as zero balance in the warehouse, input the request with a TEX code @. This TEX code tells the S1100/60 to print the output document on the input function. If off-line requisitioning action was taken during post-post, enter a TEX code 7 in cc 51, which tells the S1100/60 to establish a memo due-out.

Exercises (403):

1. What determines the types of priority requests that are accepted during a post-post period?

2. During post-post operations, asset availability checks are conducted on what items?

3. When is processing an Item Record with an IEX code performed?

4. What TEX code identifies an item issued by post-post procedures?

5. What is the difference between a DIFM item that is issued and a DIFM item that is backordered when filling out a DD Form 1348–1?

6. What happens to routine requests that are accepted but not processed by DPU?

1-2. Mission Support Section

As you read in the previous section, priority requests with UND A (except AO or AR) and UJC BQ require verification if the property is not on hand to satisfy the issue. If the end item is MICAP (mission capable) reportable, the request may be verified as MICAP. TO 00–20–2 identifies those end items (by SRD) that are MICAP reportable. A MICAP is the most urgent requirement that can be placed on Supply. A MICAP condition exists when an aerospace vehicle or piece of equipment cannot perform its mission due to the lack of a supply part. Special procedures exist to ensure that these requirements are processed by the most expedient means available.

404. Cite the procedures for verifying a MICAP condition.

MICAP Verification. When the requesting activity determines that a particular item is needed to repair an aircraft or piece of equipment, a demand is placed with DPU. The requesting activity generally knows before the demand is placed that if the item is not available in supply the aircraft or piece of equipment will go into a MICAP condition. If the item is issued, repair continues. If the item is not issued, program control kills the request and the

special MICAP procedures become effective. An I023, Other Asset Data Notice, is output. This notice states the total base asset position of the item requested. Included in the management notice are item and detail records on all master, interchangeable, and substitute items in the I&S group, if one exists.

MICAP Checklist. The S1100/60 automatically produces a MICAP checklist (fig. 1-4) that is used to ensure that all local resources are exhausted prior to the submission of a MICAP requisition and reporting of a MICAP incident. The checklist is output on the input device for all issue requests when the following six conditions exist:

a. Type organization code is not A or B.
b. TEX code is equal to blank, 4, 7, or G, and the issue results in either a kill, memo due-out, and/or an I023 management notice.
c. UND is equal to an A.
d. UJC is not AR, 1T, or 1Z.
e. UND is MICAP reportable (1, J, or /).
f. SRD is MICAP reportable.

Every effort must be expended by supply and maintenance personnel to ensure that all possible sources on the base are exhausted before submitting a MICAP requisition. You must perform each step that is prescribed by the checklist. You should search for other assets that may be used in place of the item requested, items issued for time change, bench stocks, items issued as component parts, or repair lists. You should consider the possibility of cannibalization, withdrawal from war reserve materiel (WRM), and the priority repair of a reparable asset.

The determination of a MICAP condition is made at base level when Maintenance verifies that the end item is not mission capable and both supply and personnel verify that parts aren't available from base resources to return the end item to an operational condition. When the determination is made that a MICAP condition exists, you process the MICAP issue request with an N in cc 54 and the applicable TEX code in cc 51. This input generates a MICAP requisition and prepares a MICAP report card if the SRD has been determined to be MICAP reportable by AFLC and the MAJCOMs.

The MICAP checklist is certified by the operations support officer or a designated representative and is filed in the mission support section. These checklists are kept in file for 90 calendar days after the termination of the MICAP condition.

Exercises (404):

1. What is used to ensure that all local resources are exhausted before the submission of a MICAP requisition?

2. How long does Base Supply retain a MICAP checklist?

3. Who verifies a requirement as MICAP?

4. What is the purpose of an I023 management notice?

5. What UND codes reflect a MICAP requirement?

405. Define the terms "cannibalization" and "lateral support," and state what is used to monitor MICAP requisitions.

Lateral Support. Normally, MICAP conditions are satisfied through the receipt of property from the source of supply. However, MICAP conditions may be satisfied, as directed by major commands, through the shipment of parts from one base to another. This is called *lateral support*.

Before a lateral requisition is established, contact (normally by telephone) is made between the two bases involved to ensure that the part required is available for shipment. Keep in mind that duplicate, lateral, and depot requisitions are not authorized; and that once a requisition is submitted to the source of supply, lateral requisitions may not be processed until a confirmed delayed shipment status is received. Special requisitions (SPR) procedures are used to load lateral requisitions once the determination has been made to go lateral support and an asset has been located.

Cannibalization. Removing a part from one end item for installation on another is called cannibalization. Cannibalization is authorized to preclude a MICAP condition, to stop an existing MICAP condition, or to transfer a reported MICAP condition from one end item to another. For example, aircraft 8412345 is scheduled to fly the next day, yet the airplane is grounded for a pressure regulator. Maintenance may decide to remove the regulator from an airplane that isn't scheduled to fly so that aircraft 8412345 can meet its mission. This is called *cannibalization*. You now have a due-out with the wrong mark for and an aircraft that needs a regulator. By processing a cannibalization, the due-out is transferred to the aircraft that supplied the part.

Maintenance Supply Liaison (MSL/Materiel Control) verbally notifies the mission support section when a reportable cannibalization occurs. This information is documented on the MICAP worksheet or a locally developed form/register. An input (TRIC NOR) is then prepared and processed to report the cannibalization.

Priority Monitor Report. Part V of the Priority Monitor Report (D18) contains MICAP due-outs and their corresponding due-ins. This report is used by the mission support section, as well as the supported activity, to monitor the current status of MICAP requisitions.

MICAP CHECKLIST

MICAP DATE START–TIME MICAP DATE START–TIME DMDLVL DOLD SD SER NBR IX SX EX RX

DATE AAC CC MPC WUC TOTAL R/O DO28/SPL LVL %BASE REPAIR WRM LVL

TO–NUMBER, FIGURE, INDEX REQUISITION NBR:_____ O & ST PART NUMBER

1. RESEARCH COMPLETED? YES___ NO___
   NEXT HIGHER ASSEMBLY: S/N _____
2. VERIFY WAREHOUSE BALANCE (I & SG): YES___ NO___
3. RECEIVING (I & SG): YES___ NO___ SUPPLY POINTS: YES___ NO___
   MSK: YES___ NO___ WRM: YES___ NO___ WRSK: YES___ NO___
4. COORDINATE ACTIONS W/MATERIAL CONTROL: YES___ NO___
5. INITIAL REQUISITION ACTION–NORMAL SOS: YES___ NO___ LATERAL: YES___ NO___

SBSS Generated MICAP Checklist (SIGNATURE) _____

MICAP CHECKLIST BREAKDOWN

LINE	CARD COL	FIELD DESIGNATION	EXCEPTION
1	4-6	Routing Identifier	
	8-22	Stock Number	
	25-29	Quantity	
	30-43	Document Number	
2		Blank	
3-4		Header Lines	
5	1-15	MICAP Date Start-Time	Note 1
	19-32	MICAP Date Stop-Time	Note 1
	36-41	Demand Level	Note 2
	45-48	DOLD	
	52-53	System Designator	
	56-58	SRD	
	61-67	Serial Number	
	70	IEX Code	
	73	SEX Code	
	76	EEX Code	
	79	REX Code	
6		Blank	
7		Header Lines	
8	2-10	Computer Date	
	14	Acquisition Advice Code	
	17	MICAP Cause Code	Note 3
	24	Maintenance Priority Code	
	30-31	Work Unit Code	
	35-40	Requisition Objective	Note 2
	48-53	Number of DO28 Special Lvls	Note 2
	65-66	Percent of Base Repair	
	75-80	WRM Lvl	Note 2
9		Blank	
10		Header Lines	
11	1-22	TO, Figure, Index	Note 4
	28-41	Requisition Number	Note 1
	55-57	O & ST Time	Note 2
	67-80	Part Number	Note 5
12		Blank	
13	21-39	Nomenclature	
14-24		Self Explanatory	Note 1

NOTE 1: Manual Entry.

NOTE 2: Obtained through interface with program GV710. If for some reason GV710 was unable to compute the information, asterisks will be printed in the applicable fields.

NOTE 3: Printed when RTRIC 1MM, option E is used.

NOTE 4: Obtained from the Part Number Detail Record (222) when the issue request is for a part number.

NOTE 5: Printed only when the issue request is for a part number.

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Figure 1–4.

Exercises (405):

1. What is the definition of a cannibalization?

2. What is used to record cannibalization actions?

3. What is the definition of lateral support?

4. What is used to establish a lateral requisition?

5. What is used by the mission support section to monitor the current status of MICAP requisitions?

406. State when and how MICAP reporting is initiated and terminated and what is used to monitor MICAP reports.

MICAP Reporting. MICAP reporting takes place automatically with the output of MICAP report cards (DIC B9x) during online processing. These cards are output and transceived to the applicable ALC to report the initiation, termination, or change of a MICAP condition. MICAP conditions are reported to the applicable ALC, possessing major command, and in some instances, subcommands. So, two or three B9x cards may be output for each MICAP condition. These reports are monitored through the use of the MICAP Status Report, R49.

The MICAP occurrence is reported on the day it begins and is not terminated until the day it stops, either through due-out release, downgrade, or cancellation. If the S1100/60 is inoperative for more than 4 days, manual reporting of new incidents to AFLC and MAJCOMs is accomplished. You have to manually prepare MICAP report cards (DIC B9x).

Initiating MICAP reporting. MICAP reporting is initiated when a due-in is established to satisfy a MICAP condition. This is done either by processing an ISU with an N in cc 54, or by processing an SPR to firm up a memo MICAP due-out. Upgrading an existing requisition to a reportable MICAP also initiates MICAP reporting.

Terminating MICAP reporting. MICAP conditions are terminated at the time of a due-out release, due-in or due-out cancellation, or a downgrade to a non-MICAP condition. When any of these transactions occur, B9x cards are output and transceived to report termination of the MICAP requirement.

MICAP notification cards. These cards (TRIC NOR) are prepared offline by mission support section personnel to report changes, cannibalization actions, record incidents, or to make corrections to MICAP conditions not processed under program control. NOR cards are also used for upgrading and downgrading to and from MICAP conditions. Each time a NOR card is processed, B9x cards are produced to report the applicable change.

Exercises (406):

1. What is used to monitor MICAP reporting?

2. What is used to upgrade an existing requisition to a reportable MICAP?

3. When is MICAP reporting terminated?

4. What DIC automatically reports MICAP incidents during online processing?

5. When is MICAP reporting initiated?

6. What is the purpose of a MICAP report?

7. To what agencies are MICAP reports submitted?

CHAPTER 2

Research Publications

WHEN AN ITEM is requested for the first time through DPU, the Item Record must be researched and loaded before the request can be processed. In this chapter, we discuss the various types of publications used to conduct an indepth research of requested items. It is not uncommon for items made by different manufacturers to have the same part number. By using the various research publications, you can identify the correct part number. Even if you're not assigned to either the research unit or records maintenance unit, everyone in Supply or Materiel Control must be familiar with research publications to ensure that the correct item is ordered.

2-1. Indexes and Handbooks

Several times a day demand processing personnel receive requests for items by part number. Requests received in this manner require additional research action to determine a national stock number (NSN). This section is devoted to the explanation of the various research tools used in the research unit.

The research unit maintains a current central research file of stock lists and supply publications. This file consists of AF, DLA, GSA, and other services' supply publications as required to support base assigned and logistically supported equipment. The research unit also maintains a current publications index file, publication requirement tables, publication requisitions, distribution cards, and a follow-up file for shortages. The research unit is responsible for suspensing and routing technical publications received to the appropriate action agencies on or before the effective date. In order to do this job effectively, the research unit should use the USAF S-2A-1, Index of USAF and DOD Federal Supply Catalogs and Related Cataloging Publications.

407. Cite the purpose of the USAF S-2A-1, TOs 0-1-01 and 0-1-02, and extract specified data from given pages of the S-2A-1.

USAF S-2A-1. As you read in Chapter 1, issue requests may be called into DPU by NSN or part number (P/N). NSNs that aren't loaded or P/N requests require action by the research unit. There are several publications that may be used for this purpose. First, no matter which publication is used, it must be up to date. To verify the date, use the S-2A-1.

The USAF S-2A-1 is an index that lists the current Federal catalog system publications used by the Air Force and provides guidance for getting these publications. The S-2A-1 Numerical Index is the basis for the inspection and maintenance of supply cataloging publication files and for checking the currency of files that contain the publications listed in it. File clerks have the option of annotating the S-2A-1 to indicate those publications that are actually maintained in the files. By the use of two symbols, the plus (+) and minus (−) signs, you can maintain a current record of your publications. The minus (−) symbol indicates that the publication is required, but it is not in file, is not complete, or is not current; however, it is on order. The plus (+) sign indicates that the publication is in file and is complete. Enter any new publications (basic or revision) that are received between issues of the S-2A-1 index with the applicable class or group, or other applicable listing in the index.

The S-2A-1 reflects the "Pub Date" for each publication listed. The Pub Date means the respective publication is current as of that date and should be in the hands of the user approximately 30 days following the Pub Date. A basic S-2A-1 is issued quarterly. *Federal Supply Catalogs* and related cataloging [redacted] are sent to the publishing distribution office (PDO) semiannually (January and July).

Figures 2-1 and 2-2 show a portion of the different sections of the S-2A-1. Section 1 contains the USAF Interchangeability and Substitution Grouping Stock List (SL-ISG), Part Number History, Consolidated Management Data List of all FSC Classes (ML-C), and Identification Lists (IL) for all FSC classes. Section 2 contains cataloging handbooks H2-1, H2-2, H3, H4-1/H4-2, H4-3, H5, H6, H7, and H8-1/H8-2. Section 3 contains the Master Cross Reference List (MCRL-1, MCRL-2, MCRL-3) and the S-2A-1. The publications contained in Sections 2 and 3 are not associated with specific groups or classes.

Numerical Index and Requirement Tables (NI&RTs). Numerical Index and Requirement Tables (NI&RTs) show the status of technical orders (TOs) and provide a basis for determining distribution and requisition requirements to update TO files and records. USAF activities requiring continued distribution of TOs need two specific NI&RTs: TOs 0-1-01 and 0-1-02.

TO 0-1-01. TO 0-1-01 (NI&RT) is commonly known as the *Index of Indexes* because it lists the most current status of all NI&RTs. Its preface contains information applicable to all NI&RTs.

To determine the latest issue of the NI&RT for a particular TO, check table 1-1 of the preface in TO 0-1-01.

SECTION 1	
**	AVIL – Audiovisual Material Catalog (MM)
1 Mar 84	Basic Projected Basic, 1 Mar 85, Not Published
	DoD Consolidated Ammunition Catalog (MM)
1 Apr 85 1 Oct 85*	Basic Basic (Replaces Basic, 1 Apr 85)
	DLA Lumber, Millwork and Plywood Catalog (HC)
1 May 85 1 Oct 85*	Basic Basic (Replaces Basic, 1 May 85)
SL-ISG	USAF Interchangeability & Substitution Grouping Stock List (MM)
	Basics issued Bimonthly. (Jan, Mar, May, Jul, Sep, and Nov)
	Part Number History (MM)
Mar 82	Basic-See para 3d(3) of Preface for requisitioning instructions.
ML-C	Consolidated Management Data List of all FSC Classes. Includes CMD (MM)
1 Oct 85*	Basics issued quarterly. (Jan, Apr, Jul, & Oct)
FSG 1000	Weapons
	C1000-IL (MM)
1 Sep 84 1 Dec 85 P*	Basic Basic (Will Replace Basic, 1 Sep 84)
FSG 1100 CM	Nuclear Ordnance
	C1100-ML/IL-AF (CM) Requisition Source SA-ALC
1 Mar 85 1 May 85* 1 Jun 85* 1 Jul 85* 1 Aug 85* 1 Sep 85*	Basic CB-1 CB-2 (Supersedes CB-1, 1 May 85) CB-3 (Supersedes CB-2, 1 Jun 85) CB-4 (Supersedes CB-3, 1 Jul 85) CB-5 (Supersedes CB-4, 1 Aug 85)
FSG 1200	Fire Control Equipment
	C1200-IL (MM)
1 Apr 85	Basic
FSG 1400	Guided Missiles
	C1400-IL (MM)
1 Dec 84 1 Dec 85 P*	Basic Basic (Will Replace Basic, 1 Dec 84)
FSG 1500	Aircraft and Air Frame Structural Components
	C1500-IL (MM)
1 Oct 84 1 Apr 85 1 Oct 85*	Basic CB-1 Basic (Replaces Basic, 1 Oct 84; CB-1, 1 Apr 85)
FSC 1610/15/20/30	Aircraft Propellers; Helicopter Rotor Blades, Drive Mechanisms & Components; Aircraft Landing Gear Components; Aircraft Wheel and Brake Systems
	C1610/15/20/30-IL (MM)
1 Apr 85	Basic
FSC 1650	Aircraft Hydraulic, Vacuum, & De-icing System Components
	C1650-IL (MM)
1 Jan 85 1 Jan 86 P*	Basic Basic (Will Replace Basic, 1 Jan 85)
FSC 1660	Aircraft Air Conditioning, Heating & Pressurizing Equipment
	C1660-IL (MM)
1 May 85	Basic
FSC 1670	Parachutes; Aerial Pick Up, Delivery, Recovery Systems; & Cargo Tie Down Equipment
	C1670-IL (MM)
1 Apr 85	Basic
FSC 1680	Misc Aircraft Accessories & Componenets
1 May 85	C1680-IL (MM) Basic

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Figure 2–1. S–2A–1 (extract).

SECTION 2	
	Introduction to Federal Supply Catalogs and Related Publication; C1-V2
Volume 2	Federal Supply Catalog Management Data List (ML) (For Use With the ML-C)
Feb 1984	Short Title; C1-V2
Volume 4	Federal Supply Catalog Master Cross-Reference List (MCRL)
	For Use With the MCRL-1, -2, & -3.
Jun 1984	Short Title; C1-V4
Volume 5	Federal Supply Catalog Identification List (IL)
	For Use With the FSC/FSG ILs
Jun 1984	Short Title; C1-V5
Volume 24	Federal Supply Catalog Audio Visual
	For Use With the Audiovisual Equipment Catalog (AEC) only
Mar 1984	Short Title; C1-V24
	*Only recipients of the AEC should requisition.
**	See Instructions in Paragraph 3e of Preface to Establish Requirements for the C1-Volumes.
H2-1	Cataloging Handbook (MM) Federal Supply Classification Part 1 -- Groups & Classes
1 May 84	Basic
H2-2	Cataloging Handbook (MM) Federal Supply Classification Part 2. Numeric Index of Classes
1 Jan 85	Basic
H3	Cataloging Handbook (MM) Department of Defense Ammunition Codes
1 Jan 85	Basic
H4-1/H4-2	Cataloging Handbook (MM) Federal Supply Code for Manufacturers, Part 1 -- Name to Code and Part -- Code to Name.
	Basics Issued Bimonthly (Feb, Apr, Jun, Aug, Oct and Dec)
H7	Cataloging Handbook (For Official Use Only. "Distribution Limited to US Government Civil Agencies & Military Activities Only:) Manufacturers Part & Drawing Number System. Changes are issued quarterly.
Oct 81	Basic
Apr 82	CHG NO.-1
Jul 82	CHG NO.-2
Oct 82	CHG NO.-3
Jan 83	CHG NO.-4
Apr 83	CHG NO.-5
Jul 83	CHG NO.-6
Jan 85	CHG NO.-7
Apr 85	CHG NO.-8
Jul 85	CHG NO.-9
Oct 85	CHG NO.-10
H8-1/H8-2	Cataloging Handbook (MM) Nongovernment Organization Codes for Military Standard Contract Administration Procedures (MILSCAP). Part 1 -- Name to Code, Part 2 -- Code to Name.
	Basics Issued Bi-Monthly (Feb, Apr, Jun, Aug, Oct and Dec)
	See AFR 0-14 for ordering procedures.
SECTION 3	
MCRL-1	Master Cross Reference Index (MM)
	Basics are issued quarterly. (Jan, Apr, Jul and Oct)
MCRL-2	Master Cross Reference Index (MM)
	Cross References from National Stock Number (NSN) to Part Number
	Basics are issued quarterly. (Jan, Apr, Jul and Oct)
MCRL-3	Master Cross Reference Index (MM)
	Cross References from Part Number to National Stock Number (NSN) Sequenced by Federal Supply Code for Manufacturers.
	Basic Distributed Yearly (Oct). Distribution (L). Controlled by AFLC CASC/CBR. See B Page.
S-2A-1	Index of USAF & DOD Federal Supply Catalogs & Related Cataloging Publication
1 Dec 85*	Basics are issued quarterly. (Mar, Jun, Sep and Dec)

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Figure 2-2. S-2A-1 (extract).

Then you refer to that NI&RT for the current data of that TO. For example, if you wanted data on TO 1F-4C-3-1, you check the preface of TO 0-1-01 to obtain the NI&RT. Since this TO begins with 1F, the appropriate NI&RT is TO 0-1-1-4 and that is what you use to find the current status of TO 1F-4C-3-1.

TO 0-1-01 consists of two parts. Part I lists only new, updated, and inactivated TOs. Part II lists active, published, and unpublished TOs.

TO 0-1-02. This NI&RT (General Technical Orders) contains data applicable specifically to itself. It lists general TOs including TO 00-5-1, *Air Force Technical Order System*, and TO 00-5-2, *Technical Order Distribution System*.

Exercises (407):

1. What is the purpose of the S-2A-1?

2. Using figures 2-1 and 2-2, answer the following questions:
   a. What is the publication date of the IL for FSC 1660?
   b. What is the publication date for the H2-2?
   c. When are basics issued for the MCRL-2?

3. What TO is known as the *Index of Indexes?*

4. What TO lists general TOs including TO 00-5-1 and TO 00-5-2?

408. State the purpose of cataloging handbooks and extract supply data from given sources.

Handbooks. Management of supply inventories begins with the classification and identification of property. The Federal Supply Classification System provides an organized structure for grouping and relating all of the different kinds of items on a "commodity" or "class of item" basis. The Federal Supply Classification (FSC) structure consists of 78 groups, which are subdivided into 617 classes. The Federal Supply Group (FSG) identifies, by title, the commodity area covered by classes within the group.

The FSC uses a four-digit coding structure. The first two digits of the code number identify the group and the last two digits of the code number identify the classes within each group. Code numbers are assigned so that it is possible to expand the number of groups and classes as it becomes necessary. In most cases, gaps are left within each group between the numbers assigned to adjacent classes to permit the insertion of new classes in logical sequence.

The H2 series of Federal cataloging handbooks were developed to establish the Federal cataloging program. They give the basic Federal Supply Classification structure and define the commodity groups and classes within each group.

H2-1, Cataloging Handbook, Federal Supply Classification Part 1—Groups and Classes. This handbook presents the classification structure of the FSC. It shows all groups and classes listed in the arrangement of the four-digit FSC code numbering system. Where appropriate, it shows the main items that are included and excluded under the coverage of a particular class. Figure 2-3 contains a portion of a page extracted from the H2-1. You can use the H2-1 to help identify the FSG and FSC to which an item should be assigned.

H2-2, Cataloging Handbook, Federal Supply Classification Part 2—Numeric Index of Classes. This handbook provides a ready reference to item names included in each FSC. The Federal supply classes are listed in numerical sequence with an alphabetical listing of item names for each class. The names of items are listed alphabetically under the class number and title. This publication lists the items included and excluded under the coverage of a particular class.

The H4 series is used to find either the manufacturer's name or code. A nonsignificant five-digit number is assigned to manufacturers of items of supply purchased by the Federal Government. Originally, these Federal supply codes for manufacturers (FSCM) applied only to manufacturing organizations. However, to facilitate the processing of supply catalog data, the assignment of FSCMs has been expanded to include certain numbering systems developed by Government agencies. The Federal supply code for manufacturers is another element of data that is used in the identification of items of supply and/or equipment. For example:

FSCM	Manufacturer
57258	Stearns-Roger Engineering Corp. 4500 Cherry Creek Dr. Glendale, CO 80222
81078	Kalamazoo Mfg. Co. 1827 Reed Street Kalamazoo MI 49001
88006	National Aeronautics and Space Administration Washington DC 20546

H4-1, Federal Supply Code for Manufacturers, Part 1—Name to Code. This handbook lists the names of manufacturers and government organizations in name sequence, with a reference to the assigned FSCM (fig. 2-4). This publication reflects the street address, city, state, and ZIP Code for each manufacturer. The H4-1 is published in two sections. Section A, Update Summary List, represents all modifications to Section B, Active, Obsolete, Canceled List.

2815 Diesel Engines and Components
Includes Automotive, Industrial Marine, Locomotive, and all other types of Diesel and Semi-Diesel Engines.
Excludes Engines Accessories.

2820 Steam Engines, Reciprocating; and Components

2825 Steam Turbines and Components
Includes Mercury Vapor Turbines

2830 Water Turbines and Water Wheels; and Components

2835 Gas Turbines and Jet Engines, Except Aircraft; and Components
Includes All Gas Turbines and Jet Engines except Aircraft and Guided Missile Prime Moving; Airborne auxiliary and Ground Gas Turbine Power Units for Aircraft Engine Starting.
Excludes Engine Accessories.

2840 Gas Turbines and Jet Engines; Aircraft; and Components
Includes Reservoirs, Hydraulic Tank, Oil; Turbo-jet and Turbo-prop Prime Movers of Aircraft and Guided Missiles.
Excludes Engine Accessories.

2845 Rocket Engines and Components
Includes Rocket Prime Movers, Liquid Type, including Liquid JATO Units, for use in aircraft, rockets, and guided missiles; Liquid Propellants encased in consumable containers, intended for insertion into missile propulsion systems as integral parts.

2850 Gasoline Rotary Engines and Components

2895 Miscellaneous Engines and Components
Includes Wind and Compressed Air Engines.

GROUP 29

Engine Accessories

NOTE:—Unless specifically excluded, engine accessories for all vehicles, such as aircraft, motor vehicles, ships, tractors, and construction vehicles, as well as accessories for stationary engines, are classified in this group.

2910 Engine Fuel System Components, Nonaircraft
Includes Carburetors; Fuel Pumps; Fabricated Fuel Lines, Engine Fuel Filters; Fuel Tanks; Components for all engines except Aircraft and Guided Missile Prime Moving.

2915 Engine Fuel System Components, Aircraft
Includes Carburetors; Fuel Pumps; Engine Fuel Filters; Fuel Controls, Jet Engine; Fuel Filters; Water Injection Controls and Valves; Fuel Valves and strainers; Fuel Flow Regulators; Smoke Abatement Systems; Components of Aircraft and Guided Missile Prime Mover Type only.
Excludes Aircraft Fuel Tanks; Aircraft Auxiliary Engine Components; In-flight Refueling System Fuel Components.

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Figure 2–3. Groups and classes (H2–1 extract).

H4–2, Federal Supply Code for Manufacturers, United States and Canada, Part 2—Code to Name. This handbook also lists the names of manufacturers and government organizations in FSCM sequence (fig. 2-4). This publication reflects the street address, city, state, and ZIP Code for each manufacturer. The H4–2 is also published in two sections, Section A and Section B. These sections reflect the same type of information as Sections A and B of the H4–1.

H4–3, Federal Supply Code for Manufacturers, Name to Code/Code to Name (excluding US and Canada). A North Atlantic Treaty Organization (NATO) Supply Code for Manufacturers (NSCM) is a five-position alpha/numeric code (e.g., K1234) assigned to an organizational entity, located in a country other than the United States or Canada, that maintains a design control and/or is a source of supply for items procured by agencies of the Federal Government. With the adoption of the manufacturer's coding system concept by NATO member nations in 1959, the system became a part of the NATO manufacturers coding system, identifying organizations that maintain design control or are sources of supply for items procured by the NATO member nations and other participating friendly governments.

The primary use of the manufacturer's code numbering system is to support management programs, such as cataloging and standardization. The manufacturer's code is used in conjunction with the item identifying number or symbol, thus relating the manufacturers with their item of supply, production, or design in cataloging and other supply records, as well as on engineering documentation.

H6, Federal Item Name Directory (FIND) for Supply Cataloging. The FIND for supply cataloging contains supply item names with definitions, item name codes, applicable Federal Item Identification Guides (FIIG) numbers, and other related data required to prepare item identifications for inclusion in the Federal catalog system. This catalog is published annually, in three sections.

Section A, Alphabetic Index of Names, contains all basic names, colloquial names, and approved item names (AINs) with their associated FSCs, condition codes, FIIGs, and item name codes (INCs). Basically, this index is used as a dictionary of item names and their definitions (fig. 2-5).

Section B consists of two subsections. Subsection 1 is the Numeric Index of Item Name Codes to Federal Item Identification Names and Federal Item Identification Guides. This index is used as a cross-reference list to determine the item name and FIIG to use when the INC is known. Subsection 2 is the Alpha/numeric Index of Federal Identification Guides for Item Name Codes. This section is used as a cross-reference list to determine the INCs that are included in each FIIG.

Section C, Abbreviations and Symbols, lists the abbreviations and symbols used in the Federal catalog system.

H7, Manufacturer's Part and Drawing Number System. The H7 handbook illustrates the formats, systems, and, where possible, the concepts that manufacturers use to identify the items and materials they produce. From this, you can determine how part numbers are constructed by the manufacturer. You can use the H7 to check for possible part number construction errors. This handbook is FOR OFFICIAL USE ONLY, which limits distribution to government civil agencies and military activities only.

You will probably never use all of these handbooks. The most popular one is the H2–1.

Exercises (408):

1. What series of Federal cataloging handbooks was developed to establish the Federal cataloging program?

2. Which handbook presents the classification structure of the FSC?

3. Which handbook lists the items included and excluded under the coverage of a particular class?

4. Which handbook is used to find either the manufacturer's name or code?

5. Which handbook contains supply item names with definitions, item name codes, applicable Federal item identification guide numbers, and other data needed to prepare item identifications for inclusion in the Federal catalog system?

6. What cataloging handbook lists manufacturers' part and drawing number systems?

   Use figures 2-3, 2-4, and 2-5 for the following questions.

7. What is title of class 2825?

8. Are fuel tanks included or excluded from class 2910?

9. What is the FSCM for the Bay Tool and Precision Mfg. Co.?

10. FSCM 29180 identifies what company?

Supplier's Name and Address	FC
Bay State-Dover Corp 427 Plymouth Ave Fall River MA 02722 Formerly Keystone Bay State Industries Inc Boston MA A J N Phone 800-225-8140/617-679-6456	15524
Bay Swiss Mfg Co Inc 321 Coral Circle El Segundo CA 90245 Formerly in Los Angeles Calif A J N 3450 3599 Phone 213-772-3207	28271
Bay Tool and Precision Mfg Co Inc Baltimore MD	28026
Bay View Furniture Co Inc Holland MI	06240
Bay West Paper Co Inc 1100 W Mason Green Bay WI 54303	90274
Bayberry Products Co 850 Canal St PO Box 1202 Stamford CT 06904 A J N Phone 203-327-4200	07515
Bayco Industries of California 2108 Davis St San Leandro CA 94577 3433	55960
Baycom Inc Springfield VA	51728

H4-1, Section B, Extract

Supplier's Name and Address	FC
G B Industries 126 Sylvan Ave Newark NJ 07104 5251	29179
Aimes Div Introl Corp Lockport IL	29180
Aircraft Engineering Corp 15500 Texaco Ave Paramount CA 90723 A J H N Phone 213-634-2401	29181
American Machine & Foundry Co AMF Pinspotters Div Shelby OH---Replaced by AMF Inc AMF York Div York PA	29182

H4-2, Section B, Extract

Figure 2–4. H4–1 and H4–2 (extract).

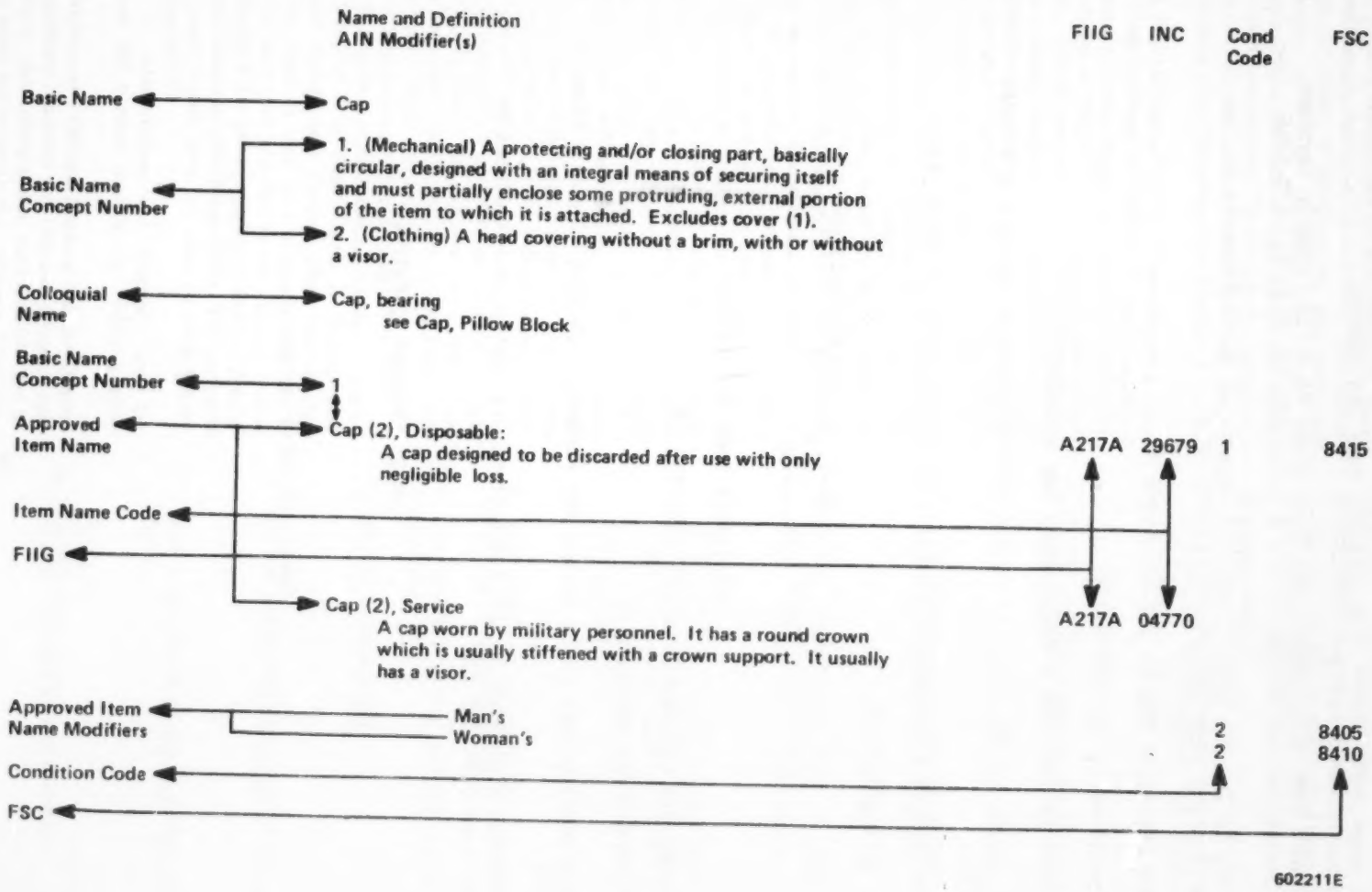
Name and Definition
AIN Modifier(s)
FIIG
INC
Cond Code
FSC
Basic Name
Cap
Basic Name Concept Number
1. (Mechanical) A protecting and/or closing part, basically circular, designed with an integral means of securing itself and must partially enclose some protruding, external portion of the item to which it is attached. Excludes cover (1).
2. (Clothing) A head covering without a brim, with or without a visor.
Colloquial Name
Cap, bearing
see Cap, Pillow Block
Basic Name Concept Number
1
Approved Item Name
Cap (2), Disposable:
A cap designed to be discarded after use with only negligible loss.
A217A 29679 1 8415
Item Name Code
FIIG
Cap (2), Service
A cap worn by military personnel. It has a round crown which is usually stiffened with a crown support. It usually has a visor.
A217A 04770
Approved Item Name Modifiers
Man's
Woman's
2 8405
2 8410
Condition Code
FSC
602211E

Figure 2–5. Graphic display of H6, Section A.

11. What is the FSC for a man's service cap?

2-2. Management Data

The publications discussed in this section are probably the most commonly used by research and materiel control personnel. All of these publications are in microfiche form and you need a microfiche viewer/reader to perform any research.

409. State the purpose and sequential arrangement of specified publications, and use given publications to identify specified information.

Master Cross-Reference Lists (MCRL). While stock numbers are used to identify items of supply, other kinds of numbers provide additional identifying data for items of production. Official item descriptions that are published in *USAF Federal Supply Catalogs* include such data as the manufacturer's part, drawing, model, type, source controlling, or specification controlling number; the manufacturer's trade name when the manufacturer identifies an item by the trade name only; and government specification, standard, drawing, and type numbers. These additional elements of identification, listed as "reference numbers," are published in three lists: (1) MCRL–1 (P/N to NSN), (2) MCRL–2 (NSN to P/N), and (3) MCRL–3 (P/N to NSN sequenced by FSCM). The Defense Logistics Services Center (DLSC) compiles the MCRLs, which are used by all military services and Federal agencies. These three publications provide a cross-reference between the manufacturer's reference (part) numbers and national stock numbers. You use the MCRL–1, MCRL–2, and MCRL–3 as reference guides to those NSNs listed in *Federal Supply Catalogs* and to other NSNs that have been established for Air Force use, but that have not yet been cataloged.

MCRL–1. This publication is a listing of the manufacturer's reference or part number, in alpha/numerical sequence, cross-referenced to the NSN and the FSCM. Figure 2-6 shows an example of the cross-reference data, format, and sequence found in the MCRL–1. The first fiche gives the purpose and explains all of the data columns of the publication. When you first use a publication in microfiche form, refer to fiche 001 for instruction usage and an explanation of provided data.

The alpha/numerical sequence of the reference numbers in the MCRL–1 is shown in figure 2-7. This sequence is determined as follows:

a. The arrangement of reference numbers begins with the first position on the left and continues, one position at a time to the right. Characters are listed in the following order:

(1) Blank/space.
(2) Symbol or special character.
(3) Alphabetic.
(4) Numeric.

(NOTE: The letter O is considered as a numerical zero.)

b. Blanks and symbols are not used as the first digit of a reference number, but may be used in the second or succeeding positions. When blanks or dashes appear in reference numbers, they take precedence over letters and numerals.

Note in figure 2-7 that reference numbers vary in length. Reference numbers that exceed 16 positions are continued on the second line of print for the item listing. When a reference number exceeds 32 positions, only 31 positions are printed in the MCRL. A dash appears in position 32 to indicate that the reference number consists of more than 32 positions, as reflected in the supply catalog item description.

MCRL–2. The MCRL–2 cross-references the same data as the MCRL–1, but goes from the NSN to the reference number. In the MCRL–2, NSNs are sequenced by the national item identification number (NIIN), without regard to the Federal Supply Class (first four positions of the NSN). An example of MCRL–2 cross-reference data, format, and the sequence of the listing is shown in figure 2-8.

M07 REF. NO.	FSCM	NSN	ISC	RNVC	RNCC	SADC	DA	ITEM NAME	REF. NO.	FSCM	NSN	ISC	RNVC	RNCC	SADC	DA	ITEM NAME
AAH00600ITEM1TYPE 3CLASS1	81348	7105-00-866-6765	5	1	4			BEDSTEAD	AAH00605	81348	7105-00-064-4017	5	1	4			TABLE, DINING
AAH00600ITEM1TYPE 3CLASS1	81348	7105-00-86607171	5	1	4			BEDSTEAD	AAH00605	81348	7105-00-064-4021	5	1	4			TABLE, DINING
AAH00600ITEM1TYPE 3CLASS1	81348	7105-00-866-7172	5	1	4			BEDSTEAD	AAH00605	81348	7105-00-064-4027	5	1	4			TABLE, DINING
AAH00600ITEM1TYPE 3CLASS1	81348	7105-00-866-7176	5	1	4			BEDSTEAD	AAH00605	81348	7105-00-064-4030	5	1	4			TABLE, DINING
AAH00600ITEM1TYPE 3CLASS2	81348	7105-00-866-6763	5	1	4			BEDSTEAD	AAH00605	81348	7105-00-064-4032	5	1	4			TABLE DINING
AAH00600ITEM1TYPE 3CLASS2	81348	7105-00-866-7173	5	1	4			BEDSTEAD	AAH00605	81348	7105-00-064-4033	5	1	4			TABLE, DINING
AAH00600ITEM1TYPE 3CLASS2	81348	7105-00-866-7176	5	1	4			BEDSTEAD	AAH00605	81348	7105-00-064-4039	5	1	4			TABLE, DINING
AAH00600ITEM11TYP E2CLASS10	81348	7105-00-859-6483	5	1	4			TABLE OCCASIONA	AAH00605	81348	7105-00-064-4041	5	1	4			TABLE, DINING
AAH00600ITEM11TYP E2CLASS10	81348	7105-00-882-1031	5	1	4			TABLE, OCCASIONA	AAH00605	81348	7105-00-064-4066	5	1	4			TABLE, DINING
AAH00600ITEM11TYP E3CLASS2	81348	7105-00-813-6686	5	1	4			VANITY DRESSER	AAH00605	81348	7105-00-066-0716	5	1	4			TABLE, DINING
									AAH00605	81348	7105-00-082-2394	5	1	4			CHAIR, STRAIGHT
									AAH00605	81348	7105-00-082-3062	5	1	4			CHAIR, STRAIGHT
									AAH00605	81348	7105-00-082-3066	5	1	4			BEDSTEAD
									AAH00605	81348	7105-00-082-3067	5	1	4			SERVER, DINING R
									AAH00605	81348	7105-00-082-3083	5	1	4			BUFFET
									AAH00605	81348	7105-00-083-6600	5	1	4			BEDSTEAD
									AAH00605	81348	7105-00-083-6603	5	1	4			BEDSTEAD
									AAH00605	81348	7105-00-083-6606	5	1	4			BEDSTEAD
									AAH00605	81348	7105-00-083-6621	5	1	4			BEDSTEAD
									AAH00605	81348	7105-00-083-6622	5	1	4			BEDSTEAD

Figure 2–6. MCRL–1 (extract).

NUMBERS	FIRST POSITION	COMPLETELY
NOT ARRANGED	ONLY ARRANGED	ARRANGED
L12700	A2460	AN931-4-16
9A746	AN931-4-16	A2460
16012	B7A14	BH10
94-189791	BH10	B7A14
TO-01-20E87	DCOA7065L	DCO-1952
W1194B	DCO-1952	DCOA7065L
914-189790	L12700	L11800
635-9V2-1-2-X2P	L11800	L12700
9	TO-01-20E87	TO-01-20E83
B7A14	TO-01-20E83	TO-01-20E87
1-2MRSD	W1194B	W1194B
DCO-1952	OK207	OK207
9-1034	1-2MRSD	1-2MRSD
A2460	16012	16012
32P010	32P010-10	32F010
DCOA7065L	32F010	32P010
BH10	32P010	32P010-10
6350-13-2	6350-13-2	635-9V2-1-2-X2P
32P010-10	635-9V2-1-2-X2P	6350-13-2
TO-01-20E83	914-189790	9
AN931-4-16	9A746	9-1034
OK207	94-189791	9A746
32F010	9-1034	914-189790
L11800	9	94-189791

GT336404E

Figure 2–7. Part number sequence.

N07 NSN	ISC	REF. NO.	FSCM	RNVC	RNCC	SADC	DA	ITEM NAME	NSN	ISC	REF. NO.	FSCM	RNVC	RNCC	SADC	DA	ITEM NAME
2990-00-001-9088	5	383508	32195	2	3		N	COVER AND LUBE	2915-00-001-9140	C	15897	24235	2	3	N		SHEET METAL ASS
		383908	80286	2	5		N	COVER AND LUBE	2915-00-001-9141	5	18418	24235	2	3	N		SHAFT ASSY, TURB
2990-00-001-9088	5	383512	32195	2	3		N	COVER ASSY	2915-00-001-9142	C	15510	24235	2	3	N		SEAL, LABYRINTH
2805-00-001-9089	5	383905	32195	2	3		N	MANIFOLD AND NI	5305-00-001-9143	2	FFS107	81348	1	4			SCREW, TAPPING, T
2805-00-001-9091	5	384072	32195	2	3		N	PISTON AND DOWE	5305-00-001-9144	2	FFS107	81348	1	4			SCREW, TAPPING, T
2805-00-001-9092	5	384073	32195	2	3		N	RING SET, PISTON	5305-00-001-9145	2	FFS107	81348	1	4			SCREW, TAPPING, T
2910-00-001-9093	5	384107	32195	2	3			NEEDLE ASSEMBLY	5305-00-001-9146	2	FFS107	81348	1	4			SCREW, TAPPING, T
2910-00-001-9094	5	384114	32195	2	3		N	CARBURETOR, FLOA	5305-00-001-9147	2	FFS107	81348	1	4			SCREW, TAPPING, T
2990-00-001-9095	5	510396	32195	2	3		N	BAND, IDENTIFICA	5305-00-001-9148	2	FFS107	81348	1	4			SCREW, TAPPING, T
5340-00-001-9096	5	690078	32195	2	3		N	PLUG, EXPANSION	5305-00-001-9149	2	FFS107	81348	1	4			SCREW, TAPPING, T
2920-00-001-9097	5	690084	32195	2	3		N	PLATE, ARMATURE	5305-00-001-9150	2	FFS107	81348	1	4			SCREW, TAPPING, T
2990-00-001-9098	5	383973	32195	2	3		N	COVER ASSY, MOTO	5305-00-001-9151	2	FFS107	81348	1	4			SCREW, TAPPING, T
		383973	80286	2	5		N	COVER ASSY, MOTO	5303-00-001-9152	2	FFS107	81348	1	4			SCREW, TAPPING, T
4720-00-001-9099		300661	21119	2	5		N	TUBING	5305-00-001-9153	2	FFS107	81348	1	4			SCREW, TAPPING, T
		300661	32195	2	3		N	TUBING	5305-00-001-9161	2	FFS107	81348	1	4			SCREW, TAPPING, T
9930-00-001-9100	5	510199	21119	2	5		N	CLAMP, LEADS	6640-00-001-9167	5	NNN8789	81348	1	4			BURET, LABORATOR
		510199	32195	2	3		N	CLAMP, LEADS			17029F	75278	1	5			BURET, LABORATOR
5320-00-001-9101	5	684366	32195	2	3		N	RIVET	6640-00-001-9168	5	NNN8789	81348	1	4			BURET, LABORATOR
5961-00-001-9102	2	007-9045-29	22373	1	C	T		SEMICONDUCTOR D			17029F	75278	1	5			BURET, LABORATOR
		1-4M0425	94990	2	3			SEMICONDUCTOR D	6840-00-001-9171	5	94-955A	73620	2	3			DISINFECTANT, GE

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Figure 2–8. MCRL–2 (extract).

Part Number History File. There are times when the part number you are looking for cannot be found in the MCRL. When this happens, don't panic like a lot of people do and rush to prepare a DD Form 1348–6, DOD Single Line Item Requisition System Document (Manual-Long Form), or an AF Form 86. Request for Cataloging Data/Action. There is one publication that may help—the *Part Number History File*. The item you need may be obsolete, replaced, or nonprocured. The *Part Number History File* contains such numbers and cross-references these numbers to current supply items. Use of the file reduces your time spent in repeated research in processing part number requisitions. These part numbers should be validated prior to requisitioning. The *Part Number History File* is published in part number sequence (space, special character. number, letter).

Exercises (409):

1. The MCRL–1 is in what sequence?

2. What is the purpose of the MCRL–1?

3. The MCRL–2 is in what sequence?

4. What is the purpose of the MCRL–2?

5. Where may part numbers not found on the MCRL be located?

6. Using figure 2-6, part number AAH00600ITEM11TYPE3CLASS2 converts to what NSN?

7. Sequence the following part numbers: 51782C, 5187C2, A–5R4, H–1158–J, and AB5R–4.

8. Using figure 2-8, NSN 5961–00–001–9102 converts to what part number?

410. Cite the purpose of ILS and the ML–C and extract requested supply data.

Consolidated Management Data List (ML–C). The ML–C is probably the publication used most by research personnel. This catalog is designed to provide requisitioners with the data they need to acquire and account for an item of supply. It contains supply management data for all items submitted to the Defense Logistic Supply Center (DLSC) by the military services, the Coast Guard, the Defense Supply Center, and the General Services Administration. Data contained in the ML–C is arranged in NIIN (national item identification number) sequence (fig. 2-9).

The index of each fiche (fig. 2-10) is located in frame 018 and consists of the first NIIN found on each frame, cross-referenced to the frame number. The index is in numeric sequence according to NIIN.

The ML–C is issued monthly, although some activities receive it quarterly or semiannually. The Air Force is one of the activities that receives it quarterly. Each monthly ML–C is a new basic edition and supersedes the ML–C that was published the month before. When a new ML–C is received, all previous microfiche may be destroyed.

Identification Lists (ILs). ILs are published to provide descriptive, reference, and illustrative data to identify or select items of supply and to facilitate interservice supply support for items in the commodity area.

The identification list consists of a minimum of two microfiche. The first microfiche contains the catalog identification or cover frame, preliminary information, introduction, illustrations, abbreviations, and item name index. The NSN index and identification data consisting of descriptive and reference method items are contained on different microfiche.

In the multiple class publication, the NSN index is sequenced by FSC in ascending order. The text portion of the publication is also sequenced by FSC and has both descriptive and reference portions for each class followed by the next class and its descriptive and reference portions.

Each microfiche contains an index frame that is located in the lower right corner of the microfiche (FRAME 018). This frame shows the first NSN or item name on each frame of the microfiche. For the NSN index, frame 018 shows the NSN on each frame and for the descriptive section the first item name.

Exercises (410):

Use the microfiche extracts in figures 2-9 and 2-10 to answer the following questions.

1. On what frame should you find NSN 6540–00–001–1161?

2. What is the unit price for NSN 3010–00–001–0069?

ACT	NSN	S/A	SOS	AAC	QUP	UI	UNIT PRICE	SLC	SEC	RC	MGMT CONTROL 1 2 3 4 5 6 7	PMI	ADP	DML	ITEM NAME	PC	PHRASE STATEMENT OR UNIT ISSUE/CONV FACTOR
	002																
	3010-00-001-0067	DF	99C	Z	1	EA	35.81	0	U	N	SF9——			A	GEAR, HELICAL		
		DS	99C	J	1	EA	253.18	0	U		————			A	COUPLING, SHAFT, RIGI		
		DF	99C	J	1	EA	253.18	0	U	P	SF9——			A	COUPLING, SHAFT, RIGI		
A	3040-00-001-0068	DS	99C	J	1	EA	11.46	0	U		————			A	CAM, CONTROL		
		DA	99C	J	1	EA	11.46	0	U	Z	J2200XX			A	CAM, CONTROL		
	3010-00-001-0069	DS	99C	J	1	EA	26.85	0	U		————			A	COUPLING, SHAFT, RIGI		
		DA	99C	J	1	EA	26.85	0	U	Z	J2200XX			A	COUPLING, SHAFT, RIGI		
	4720-00-001-0070	DS	99C	D	1	EA	33.81	0	U		————			A	HOSE ASSEMBLY, NONME		
		DM	99C	D	1	EA	83.81	0	U		9C——			A	HOSE ASSEMBLY, NONME		
C	3020-00-001-0071	DS	99C	J	1	EA	7.27	0	U		————			A	GEAR, SPUR		
		DF	99C	J*	1	EA	7.27	0	U	N	SF9——			A	GEAR, SPUR		
	3020-00-001-0072	DS	99C	J	1	EA	21.73	0	U		————			A	GEAR, ANTIBACKLASH, S		
		DF	99C	J	1	EA	21.73	0	U	N	SF9——			A	GEAR, ANTIBACKLASH, S		
	4730-00-001-0073	DS	99C	J	1	EA	44.20	0	U		————			A	COUPLING HALF, QUICK		
		DF	99C	Z	1	EA	44.20	0	U	N	SF9——			A	COUPLING HALF, QUICK		
	4730-00-001-0078	DS	99C	J	1	EA	116.82	0	U		————			A	COUPLING HALF, QUICK		
		DF	99C	J	1	EA	116.82	0	U	P	SF9——			A	COUPLING HALF, QUICK		
A	4730-00-001-0076	DS	99C	J	1	EA	225.83	0	U		————			A	ELBOW, TUBE		
		DF	99C	*	1	EA	225.83	0	U	N	SF9——			A	ELBOW, TUBE		
	3040-00-001-0077	DS	99C	J	1	EA	2.17	0	U		————			A	SHAFT, STRAIGHT		
		DF	99C	J*	1	EA	2.17	0	U	N	SF9——			A	SHAFT, STRAIGHT		
	3040-00-001-0078	DS	99C	J	1	EA	2.17	0	U		————			A	SHAFT, STRAIGHT		
		DF	99C	J*	1	EA	2.17	0	U	N	SF9——			A	SHAFT, STRAIGHT		
R	4720-00-001-0079	DS	99C	D	1	EA	44.06	0	U		————			A	HOSE ASSEMBLY, NONME		
		DF	99C	D	1	EA	44.06	0	U	N	SF9——			A	HOSE ASSEMBLY, NONME		
	4710-00-001-0080	DS	99C	D	1	EA	11.83	0	U		————			A	TUBE ASSEMBLY, METAL		
		DF	99C	D	1	EA	11.83	0	U	N	SF9——			A	TUBE ASSEMBLY, METAL		
D	4710-00-001-0081	DS	99C	J	1	EA	2.38	0	U		————			A	TUBE ASSEMBLY, METAL		
		DF	99C	D	1	EA	2.38	0	U	N	SF9——			A	TUBE ASSEMBLY, METAL		
	4710-00-001-0082	DS	99C	D	1	EA	21.84	0	U		————			A	TUBE ASSEMBLY, METAL		
		DF	99C	D	1	EA	21.84	0	U	N	SF9——			A	TUBE ASSEMBLY, METAL		
	4730-00-001-0083	DS	99C	D	1	EA	57.81	0	U		————			A	ELBOW, TUBE TO BOSS		
		DF	99C	D	1	EA	57.81	0	U	N	SF9——			A	ELBOW, TUBE TO BOSS		
	4720-00-001-0084	DS	99C	D	1	EA	19.43	0	U		————			A	HOSE ASSEMBLY, NONME		
		DF	99C	D	1	EA	19.43	0	U	N	SF9——			A	HOSE ASSEMBLY, NONME		

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Figure 2–9. ML–C (extract).

INTRODUCTION .. A01 00-001-1054 .. E05 00-001-3331 .. I09 00-001-5845 .. M13
INTRODUCTION .. B01 00-001-1075 .. F05 00-001-3383 .. J09 00-001-5871 .. N13
INTRODUCTION .. C01 00-001-1096 .. G05 00-001-3414 .. K09 00-001-5896 .. O13
INTRODUCTION .. D01 00-001-1116 .. H05 00-001-3442 .. L09 00-001-5925 .. A14
INTRODUCTION .. E01 00-001-1137 .. I05 00-0C1-3467 .. M09 00-001-5950 .. B14
INTRODUCTION .. F01 00-001-1158 .. J05 00-001-3494 .. N09 00-001-6137 .. C14
INTRODUCTION .. G01 00-001-1178 .. K05 00-001-3524 .. O09 00-001-6167 .. D14
INTRODUCTION .. H01 00-001-1199 .. L05 00-001-3554 .. A10 00-001-6195 .. E14
INTRODUCTION .. I01 00-001-1220 .. M05 00-001-3586 .. B10 00-001-6223 .. F14
INTRODUCTION .. J01 00-001-1252 .. N05 00-001-3644 .. C10 00-001-6249 .. G14
INTRODUCTION .. K01 00-001-1287 .. O05 00-001-3678 .. D10 00-001-6279 .. H14
INTRODUCTION .. L01 00-001-1374 .. A06 00-001-3726 .. E10 00-001-6306 .. I14
INTRODUCTION .. M01 00-001-1412 .. B06 00-001-3798 .. F10 00-001-6334 .. J14
00-000-0047 .. N01 00-001-1441 .. C06 00-001-3833 .. G10 00-001-6395 .. K14
00-000-0073 .. O01 00-001-1469 .. D06 00-001-3912 .. H10 00-001-6453 .. L14
00-000-0113 .. A02 00-001-1500 .. E06 00-001-3942 .. I10 00-001-6478 .. M14
00-000-0148 .. B02 00-001-1533 .. F06 00-001-3981 .. J10 00-001-6502 .. N14
00-001-0023 .. C02 00-001-1568 .. G06 00-001-4072 .. K10 00-001-6543 .. O14
00-001-0067 .. D02 00-001-1630 .. H06 00-001-4108 .. L10 00-001-6582 .. A15
00-001-0104 .. E02 00-001-1681 .. I06 00-001-4147 .. M10 00-001-6627 .. B15

12881

Figure 2–10. ML–C (index extract).

3. What is the unit of issue for NSN 4720–00–001–0084?

4. What is the purpose of the ML–C?

5. What is the purpose of ILs?

411. Cite the purpose of the SL–ISG and extract requested supply data.

USAF Interchangeability and Substitution Grouping Stock List (SL–ISG). The SL–ISG is an official source for the dissemination of interchangeability and substitution program. This program provides for the establishment and maintenance of a system (D097) for selecting and placing into homogeneous groups and subgroups all NSN items for which the Air Force has established a user interest. This includes items that are freely interchangeable (two-way) and items that can be substituted (one way), one for another.

To effectively use the SL–ISG, you need to understand its format, the use of codes to identify relationships within an I&S (interchangeable and substitution) group, and criteria followed in designating and positioning items within a group. An I&S group consists of two or more items that render performance that can be related to a specific requirement. Through research, one item within each I&S group is determined to be the most desirable to meet the needs of the Air Force. This preferred item is designated as the master item of the I&S group.

Section 1, Cross-Reference Section. This section is a composite listing, in NSN sequence, of all stock numbers contained in the SL–ISG. It is the starting point when researching for AFLC I&S relationships. This section refers the user to section two or three where actual relationships can be determined. As a user of the SL–ISG, you should first check Section 1 to determine whether the item is I&S-grouped, and/or whether there has been a change in the master item.

Section 2, I&S Grouping Section. This section gives you information as to the kind of items in the group, the group identity, the suitability, the relationships that exist, and the order in which the items should be supplied or used. It also indicates the identity of the responsible I&S activity.

An I&S group is made up of one or more subgroups, depending upon the relationships that exist and the number of items involved. Subgroups, in turn, are made up of one or more items, including both suitable and unsuitable items. Except for unsuitable items, all items in a subgroup are freely interchangeable, regardless of application. When interchangeable items are converted to an unsuitable condition, they are kept in the same subgroup and identified by a code that indicates the reason for the unsuitable condition.

Subgroups are identified by a two-position alphabetical designator (i.e., AA, AB, AC, etc.). When an I&S group consists of one or more subgroups, they are arranged in an order of retention and identified accordingly, starting with AA, the least desired subgroup. In this case, AC would be the most desired subgroup.

Each item within a subgroup is assigned a parts preference code (PPC). Suitable items are assigned a single-position alphabetical parts preference code (A, B, C, etc.) to indicate the order of preference within the subgroup. Code A denotes the least preferred item in a subgroup. Unsuitable items are assigned a numerical parts preference code (NPCC), based upon the condition that caused the item to be designated as unsuitable.

Items in an I&S group, which can be substituted for another item, or other items in the same I&S group are identified by a three-position "order of use" code. Order of use codes are assigned in order to attain maximum benefits from the I&S grouping data and to ensure that only valid substitutes are issued or used.

The order of use system is designed to exhaust the stocks of the least desirable items in an I&S group before the master item is used. The S1100/60 is programmed to select the first order of use item if it is available for issue. It continues to call upon the next order of use item until the master item is reached.

Figure 2-11 explains the most frequent I&S grouping relationships and code assignment. This figure is shown as it would appear in the SL–ISG. The master item is always shown last in the listing of the stock numbers. The item in subgroup AA with a numeric parts preference code (NPPC) is unsuitable and no longer meets Air Force needs. Subgroup AE consists of the most desired items in the group.

Since there is only one item in subgroups AB, AC, and AD, they are not interchangeable with any other items in the group. Only an external relationship exists (substitution possibility). The two items in the subgroup are freely interchangeable. An internal relationship exists. The two items in subgroup AE are the most preferred and can be substituted for any items in subgroups AD, AC, AB, and AA, but not vice versa. Order of use codes always direct you to the next most desired item that can be substituted.

The practice of automatically requisitioning the master (preferred) item prevents the use of potential substitutes and thereby defeats the purpose of the system. Rapid technical advancement and development of newer and better weapon systems continually result in equipment and supplies being in stock, which have a limited capability. Sometimes these items have substitution potential with little or no modification or alteration, depending once again on the local situation. It is also a matter of supply discipline and good materiel management to try to use all possible resources.

Section 3, I&S X–File Section. The X–File is a listing of I&S exception relationship decisions input to the USAF I&S system by the I&S activity. If exception conditions are resolved, these relationships are entered into Section 2 of the SL–ISG. The X–File is concerned with I&S relationships between items that cannot be I&S-grouped due to:

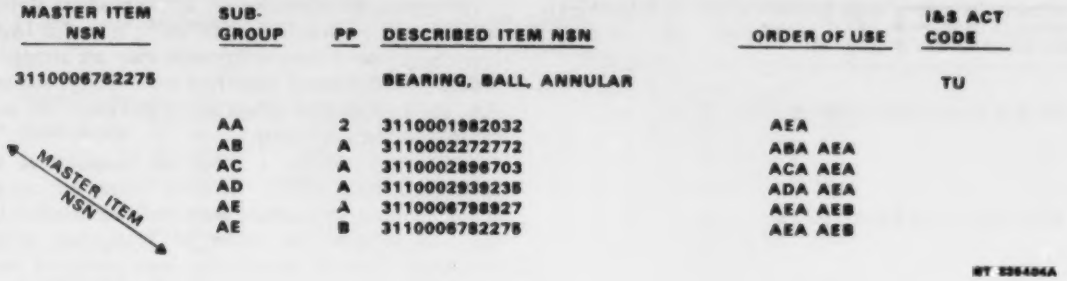


Figure 2–11. SL–ISG (extract).

- Incomplete or incompatible management data.
- An NSN identity in which the Air Force is not a registered user.
- The limited nature of the relationship.
- Classification (FSC) difference.

Exercises (411):

1. What is the purpose of the SL–ISG?

2. What is the purpose of the order of use system?

3. Which of the following subgroups within an I&S group is the *least* desired for retention: AA, AB, AC, or AD?

4. Which item in figure 2-11 is considered unsuitable and no longer meets Air Force needs and why?

2-3. Illustrated Parts Breakdown

Various kinds of technical manuals are published to provide special instructions that can be applied to different types of equipment; for example, aircraft, missiles, engines, rockets, electronic equipment, aerospace ground equipment, space systems, etc. These manuals contain information on the operation, maintenance, service, overhaul, installation, inspection instructions, and illustrated parts breakdown.

412. Cite the purpose of IPBs and how to maintain TOs, and extract requested supply data.

Illustrated Parts Breakdown (IPB). An IPB lists part numbers, nomenclature, and other information necessary to support the particular aircraft or other type of equipment to which it applies. The part numbers listed reflect the breakdown of major assemblies and subassemblies (fig. 2-12). IPBs also include illustrations of assemblies and subassemblies to further identify details and attaching parts of the assembly. IPBs give technical information for identification, requisition, and storage functions (fig. 2-13).

Research personnel use IPBs to determine the relationships of component parts to complete the assemblies and the identification of specific parts by part numbers. This is necessary to determine positive identification of certain noncataloged items and certain other items that do have a NSN assigned.

Technical orders (TO) consist of a combined numerical listing (NI&RT) applicable to a specific category of equipment or to classes of publications and data used to establish initial distribution (ID) requirements and requisition requirements as prescribed in TO 00–5–2, *Technical Order Distribution System*.

Technical orders (TOs) play a critical role in achieving system and equipment readiness. AFR 8–2, *Air Force Technical Order (TO) System*, governs the TO system with the strictest authority. Full compliance with the provisions of TO 00–5–1 and TO 00–5–2 ensures effective and economical operation of this system. Because of the diversity and complexity of supplies and equipment used worldwide, a well organized system furnishes needed information to each Air Force activity.

The TO system is the medium used to disseminate military orders of a technical nature. Each individually numbered TO provides the technical information and instructions to operate, install, maintain, inspect, or modify Air Force systems and equipment items.

The *Illustrated Parts Breakdown* is perhaps the most often used technical order utilized by supply personnel. Demand processing, research unit, and mission support personnel should be thoroughly knowledgeable on the use of the IPB because it contains and lists replacement parts for the support of aircraft or other particular types of aerospace systems. Each IPB lists the part number (reference number/manufacturer's identification number), nomenclature, and other necessary information used to

PART NUMBER	VOLUME FIGURE & INDEX NO	SOURCE CODE	R/CODE	PART NUMBER	VOLUME FIGURE & INDEX NO	SOURCE CODE	R/CODE	VOLUME PART NUMBER	FIGURE & INDEX NO	SOURCE CODE	R/CODE
53-39296-3				53-39303-81				53-39320-1			
53-39296-30				53-39303-82				53-39320-11			
53-39296-31				53-39303-83				53-39320-13		M1	S
53-39296-33				53-39303-84				53-39320-14		M1	S
53-39296-34				53-39303-86				53-39320-15		M1	S
53-39296-35				53-39303-87				53-39320-16		M1	S
53-39296-36				53-39303-89				53-39320-17			
53-39296-37				53-39303-7				53-39320-18			
53-39296-39				53-39303-71				53-39320-91			
53-39296-40				53-39303-73		M1	S	53-39320-2			
53-39296-41				53-39303-75				53-39320-20			
53-39296-42				53-39303-76				53-39320-21			
53-39296-43				53-39303-77				53-39320-22			
53-39296-44				53-39303-78				53-39320-23			
53-39296-45				53-39303-79				53-39320-24			
53-39296-46				53-39303-80				53-39320-5			
53-39296-47				53-39303-81				53-39320-6			
53-39296-49				53-39303-83				53-39320-7			
53-39296-5				53-39303-85				53-39320-8			
53-39296-51				53-39303-87				53-39321-11			
53-39296-52				53-39303-88				53-39321-11			
53-39296-53				53-39303-89				53-39322-3			
53-39296-55				53-39303-90				53-39322-4			
53-39296-56				53-39303-91				53-39322-5		X2	S
53-39296-57				53-39303-92				53-39322-6		X2	S
53-39296-59				53-39303-93				53-39323-3			
53-39296-61				53-39303-94				53-39323-3C			
53-39296-62				53-39303-95				53-39323-901			
53-39296-63				53-39303-97				53-39324-3			
53-39296-65	1-37A- 4			53-39303-99		P2	S	53-39324-3C	1-38-64		
53-39296-67				53-39304-1				53-39325-1			
53-39296-68				53-39304-1-3				53-39325-10			
53-39296-69				53-39304-1-3P				53-39325-11		M1	S
53-39296-7				53-39305-3				53-39325-12			
53-39296-71				53-39305-4				53-39325-2	1-38-64		
53-39296-73				53-39305-5				53-39325-3			
53-39296-76	1-37A- 5			53-39306-3	1-26- 9			53-39325-4			
53-39296-77				53-39306-3C				53-39325-5			
53-39296-79				53-39306-4	1-26- 9			53-39325-6			
53-39296-8				53-39306-4C				53-39325-7			
53-39296-81				53-39307-1	1-38-39	P	S	53-39325-8			
53-39296-9				53-39307-10				53-39325-9			
53-39296-1	1-37A-11			53-39307-11				53-39329-1			
53-39296-1-3				53-39307-2	1-38-40	P1	S	53-39329-3			
53-39296-1-3C				53-39307-3				53-39329-5			
53-39297-1	1-37A- 9			53-39307-4				53-39329-7			
53-39297-3	1-37A- 7			53-39307-5				53-41000-1	1- 7- 8	U	
53-39297-6				53-39307-6					1- 7-		
53-39297-7	1-37A- 8			53-39307-7				53-41000-2	1- 7- 8	U	
53-39297-9				53-39307-8					2- 7-		
53-39299-3				53-39307-9				53-41002-1	2- 7-30	U	
53-39299-4				53-39308-3	1-38-39A			53-41002-301	2- 7-30	U	
53-39300-3	1-37A-10			53-39308-3C				53-41002-303	2- 7-30		
53-39300-3C				53-39308-4	1-38-40A			53-41003-1	2- 7-12	A	B
53-39301-3				53-39308-4C					2-10-		
53-39301-4				53-39309-11				53-41003-2	2- 7-12	A	
53-39302-3				53-39309-3					2-10-		
53-39302-3C				53-39309-4				53-41004-11	4-89-22	U	
53-39302-4				53-39309-7					4-96-27		
53-39302-4C				53-39309-9				53-41004-13	3-71-36	U	
53-39303-1	1-36 -	P1	O	53-39310-1	1-35-				3-72-47		
	1-36A-			53-39311-1	1-36-60				4-89-21		
	7- 2 -31				1-39-				4-96-25		
53-39303-100					7- 2-32			53-41004-15	4-89-22	U	
53-39303-11				53-39311-3	1-39- 7				4-96-27		
53-39303-12				53-39312-3				53-41004-3	2- 7-34	U	
53-39303-13				53-39312-3C				53-41004-7	3-71-36	U	
53-39303-15				53-39312-5	1-39-34				4-89-21		
53-39303-17				53-39312-5C				53-41100-1	2-10-48	P1	S
53-39303-18				53-39313-1				53-41100-1-3		X1	
53-39303-19				53-39313-3				53-41100-1-3F		X1	
53-39303-21				53-39313-5				53-41101-1	1-10-39	P1	S
53-39303-25				53-39313-7				53-41101-1-3		X1	
53-39303-26				53-39314-3				53-41101-1-3F		X1	
53-39303-29				53-39314-7				53-41102-1	2-10-48	P1	S
53-39303-3				53-39316-3				53-41103-1	2-10-51	X2	
53-39303-31				53-39315-5		M1	S	53-41103-1-2-3F		X1	
53-39303-32				53-39316-3				53-41103-1-3		X1	
53-39303-33				53-39316-3C				53-41103-2	2-10-51	X2	
53-39303-35				53-39316-5				53-41103-2-3		X1	
53-39303-37				53-39316-5C				53-41104-1	2-10-31	P1	S
53-39303-38				53-39317-5	1-38-61			53-41104-3		X1	
53-39303-41				53-39318-11				53-41105-5		P1	S
53-39303-43				53-39318-13				53-41108-7	2-10-42	P1	S
53-39303-44				53-39318-15				53-41108-3	2-10-16	P1	S
53-39303-46				53-39318-3				53-41107-3	2-10-32	P	S
53-39303-48				53-39318-4				53-41300-1	2- 7-61	M	B
53-39303-47				53-39318-5					3-58-		
53-39303-51				53-39318-6				53-41300-2	2- 7-61	M1	
53-39303-52				53-39318-7					3-58-		
53-39303-53				53-39318-8				53-41301-11	3-58-10	M	S
53-39303-55				53-39318-9				53-41301-12	3-58-10	P	B
53-39303-59				53-39319-3				53-41301-13	3-58- 9	M	B
53-39303-60				53-39319-4				53-41301-14	3-58- 3	M1	R

GT335404E

Figure 2–12. IPB (extract).

VOLUME FIGURE INDEX NO.	PART NUMBER	1 2 3 4 5 6 7 DESCRIPTION	UNITS PER ASS'Y	USABLE ON CODE
2-5-	32-41402-301	MECHANISM INSTL, MAIN LANDING GEAR SHRINK LH (SEE FIG. 2-7-82 FOR NHA)	REF	
	32-41402-302	MECHANISM INSTL, MAIN LANDING GEAR SHRINK RH (SEE FIG. 2-7-82 FOR NHA)	REF	
-1	32-41306-1	. LINK ASSY, MAIN LANDING GEAR UPPER SHRINK	1	
		(ATTACHING PARTS)		
-2	32-41308-5	. BOLT, CRANK UPPER SHRINK LINK ATTACHMENT	1	
	AN960-916L	. WASHER (1 UNDER HEAD & 1 UNDER NUT)	2	
	NAS1022A9	. NUT	1	
-3	NAS464-9-27	. BOLT	1	A
	NAS464P8A29	. BOLT	1	B
	NAS464P9-37	. BOLT	1	C
	AN960D916	. WASHER (1 UNDER HEAD & 1 UNDER NUT)	2	
	NAS1022A9	. NUT	1	
		----*----		
-4	32-41307-1	. . ROD END ASSY, MAIN LANDING GEAR UPPER SHRINK	1	
-5	NAS516-1	. . . FITTING	2	
-6	BLN9003GC	. . . BEARING (81378)	1	
-7	AB316-12R	. . NUT	1	
-8	32-41309-1	. . ROD ASSY, MAIN LANDING GEAR UPPER SHRINK	1	
-9	NAS516-1	. . . FITTING	2	
-10	BLN9003GC	. . . BEARING (81378)	1	
-11	32-41405-301	. BELL CRANK ASSY, MAIN LANDING GEAR SHRINK LH (PARTS KIT AVAILABLE)	1	
-11	32-41405-302	. BELL CRANK ASSY, MAIN LANDING GEAR SHRINK LH (PARTS KIT AVAILABLE)	1	
-12	MS20004-17	Δ . . BOLT (KD)	1	
	MS20002C4	Δ . . WASHER (KD)	1	
	AN960D416	Δ . . WASHER (KD)	1	
	LH3393-048	Δ . . NUT (72982) (MCDONNELL SPEC 3M221-4) (KD)	1	
-13	MS20004-22	Δ . . BOLT (KD)	1	
	MS20002C4	Δ . . WASHER (KD)	1	
	AN900D416	Δ . . WASHER (KD)	1	
	LH3393-048	Δ . . NUT (72982) MCDONNELL SPEC 3M221-21) (KD)	1	
-14	NAS516-1	Δ . . FITTING (KD)	3	
-15	4M46P16-80	Δ . BRUSHING (78301) (KD)	1	
-16	32-41521-5	. . PIN, CRANK	(1)	
-17	32-41690-3	. . WASHER SPECIAL	(1)	
-18	AN320-12	. . NUT	(1)	
-19	MS24665-373	. . PIN	(1)	
-20	32-41408-7	Δ . . BUSHING (KD)	1	
-21	RST56C	Δ . . RING, RETAINING (80756) (MCDONNELL SPEC 9M187-58) (KD)	2	
-22	AN960D916	Δ . . WASHER (KD)	2	
-23	32-41310-5	. . TRUNNION, MAIN LANDING GEAR SHRINK MECHANISM FITTING	1	
-24	32-41133-3	Δ . . BUSHING, CRANK ASSY MAIN LANDING GEAR SHRINK (KD)	2	
-25	4M45-9-29	Δ . . BUSHING, SLEEVE (78301) (KD)	2	
-26	32-41405-3	X . . BELL CRANK, L/SIDE	1	
	32-41405-4	+ . . BELL CRANK, L/SIDE	1	
-27	32-41405-5	X . . BELL CRANK, R/SIDE	1	
	32-41405-6	+ . . BELL CRANK, R/SIDE	1	
	0903-1	. PARTS KIT, OVERHAUL, MAIN LANDING GEAR SHRINK BELL CRANK ASSY (78301)	1	
-28	32-41120-305	. LINK ASSY, MAIN LANDING GEAR LOWER SHRINK	1	
-29	32-41131-7	. . ROD END ASSY, MAIN LANDING GEAR LOWER SHRINK LINK	1	
-30	NAS516-1	. . . FITTING	1	
-31	BLN900300	. . . BEARING (81378)	1	
-32	NAS509-8	. . NUT	1	
-33	9M103-8	. . WASHER, ROD END LOCKING (78301)	1	
	32-41120-13	. . LINK	1	
-34	AN320-8	. NUT	1	
-35	4M38-04015	. WASHER, FLAT (78301)	1	
-36	MS24665-286	. PIN	1	

+ MATCHED PARTS MUST BE REPLACED AS A SET.
X MATCHED PARTS MUST BE REPLACED AS A SET.
Δ INDICATES COMPONENT OF 0903-1 OVERHAUL KIT.

CODE	MODEL	USABLE ON
A	F-4C	62-12199 THRU 64-672.
	RF-4C	63-7740 THRU 64-1037.
B	F-4C	64-673 THRU 64-746.
	RF-4C	64-1038 THRU 64-1082.
C	F-4C	64-747 & UP.
	F-4D	ALL.
	RF-4C	64-1083 & UP.

QT3364046

Figure 2-13. Group assembly parts listing (IPB extract).

identify, procure, and requisition supply items. They also include illustrations and figures of assemblies and subassemblies that identify in detail the attaching parts.

Each technical order has an identifying number. Each number has three or more parts and each part is separated by a dash. The meaning of each part of a TO number breakdown is normally explained in the preface of that TO's NI&RT. IPBs are normally identified and published in the dash four (−4) series of technical orders. For example; TO 1F−4C−4−7 is broken down as follows: 1F identifies the type of aircraft; the −4C identifies the type of model for that aircraft; −4 identifies the type of publication, which in this case is the IPB; and the −7 identifies the volume (the seventh volume).

IPBs normally consist of the following major sections.

a. The Table of Contents lists the major groups that appear in the IPB and the illustrations, assemblies, etc., which make up the groups and/or systems of the aircraft or equipment contained in that particular volume.

b. The Introduction explains the system used to number or identify the contractor drawings and parts. It explains the arrangement of parts information within the Group Assembly Parts List and how the TO can best be used to provide desired information needed to succeed in doing a task. Instructions for use of the Numerical Index and Reference Designation Index are provided, in addition to information required in the use of the publication itself.

c. The Group Assembly Parts List contains the replaceable parts breakdown for all structure mechanisms, systems, and aerospace ground equipment. The list is arranged to show the sequence in which a complete aircraft may be disassembled into groups, assemblies, subassemblies, and detail parts in the assembly breakdown order. Illustrations/figures are shown in conjunction with the parts listing to show each item and to cross-reference it to the parts list. Each illustration/figure is identified by a figure number and the majority of the items shown are assigned an index number (fig. 2-14).

The names of parts are listed in the Description column by an indent dot system. The indent system shows the assembly relationship of each part with respect to other parts in the breakdown; it shows how the various parts build up into subassemblies and major assemblies to make a complete assembly. The next higher assembly (NHA) can be determined by this indent dot system. The "figure and index number" entries refer you to the illustration of the part (fig. 2-13).

d. The Numerical Index is arranged into one continuous alpha/numerical list containing all contractor parts and standard and vendor part numbers used on the system. This index provides the part number, volume, figure, and index number; plus source and repair codes. These items are cross-referenced to the figure and index number within the Group Assembly Parts List to show its exact relationship.

Refer again to figure 2-12 in the text. Notice that you have a source code and repair code (R/code) column. Both of these columns contain important information. These codes were assigned by the Air Force when the equipment was purchased. Source codes identify how the parts are obtained (i.e, requisitioned through supply, local manufacturer, next higher assembly (NHA), etc.). Repair codes identify the level of repair authorized for applicable parts (i.e., nonreparable (condemn), recondition, field level repair, limited field repair, etc.). When an item is being researched through technical order publications, it would be wise to first check the source and repair code of the item.

Occasionally, the part needed is not available or is source-coded X1, which requires that the next higher assembly (NHA) be ordered. Refer to figure 2-13, index numbers 4 and 5. Notice that in the Description column that index number 4 has two dots and index number 5 has three dots. These dots mean that index number 4 is the higher assembly for all the items below it that have more dots. If you look at the top of the Description column, you see that the dot columns are numbered from 1 to 7. This makes it easier for you to see which assemblies and component parts go together. The NHA for index numbers 5 and 6 is index number 4 (i.e., the rod end assembly contains the fitting and bearing).

Maintenance of TOs. The research unit acts as the single point of contact for technical publication requirements and distribution for COS activities. This unit ensures that the TO files are reconciled each year with all supported organizations. This action is required to maintain a limited file of technical orders for research applicable to types of equipment supported, primarily parts lists, and administrative technical orders. This unit suspenses and routes technical publications received to the appropriate action agencies on or before the effective date.

An AFTO Form 110 is used to maintain a record of TOs required, received, redistributed, and TOs maintained when the activity maintains one or more TO files.

After a TO file is initially established, its currency and accuracy are checked annually against the current issue of the appropriate NI&RT (including current supplements, if any) and the AFTO Form 110 file. Technical orders should be current at all times to ensure that equipment is not operated, maintained, or modified, using outdated technical instructions.

Technical orders are updated by the following methods.

a. Changes are issued when only parts of the existing TO are affected. The changed pages replace the corresponding numbered pages and all replaced pages must be removed from the TO and discarded or placed in the replaced pages file as applicable.

b. A revision is a complete new edition of an existing TO and has a new basic date. It includes existing changes and replaces any supplements listed in the replacement note on the title page.

c. Supplements are issued to augment or change data in basic TOs that are not applicable to the inclusion of individual change pages. Supplementing supplements is not authorized. Supplements may be cumulative or noncumulative.

d. An appendix is used to include material in a TO that is not part of the normal sequence outlined in the table of contents, such as tables, charts, and so on. Such added material becomes an integral part of the affected TO.

e. Rescissions occur when the information contained in the TO is no longer required or is incorporated in other

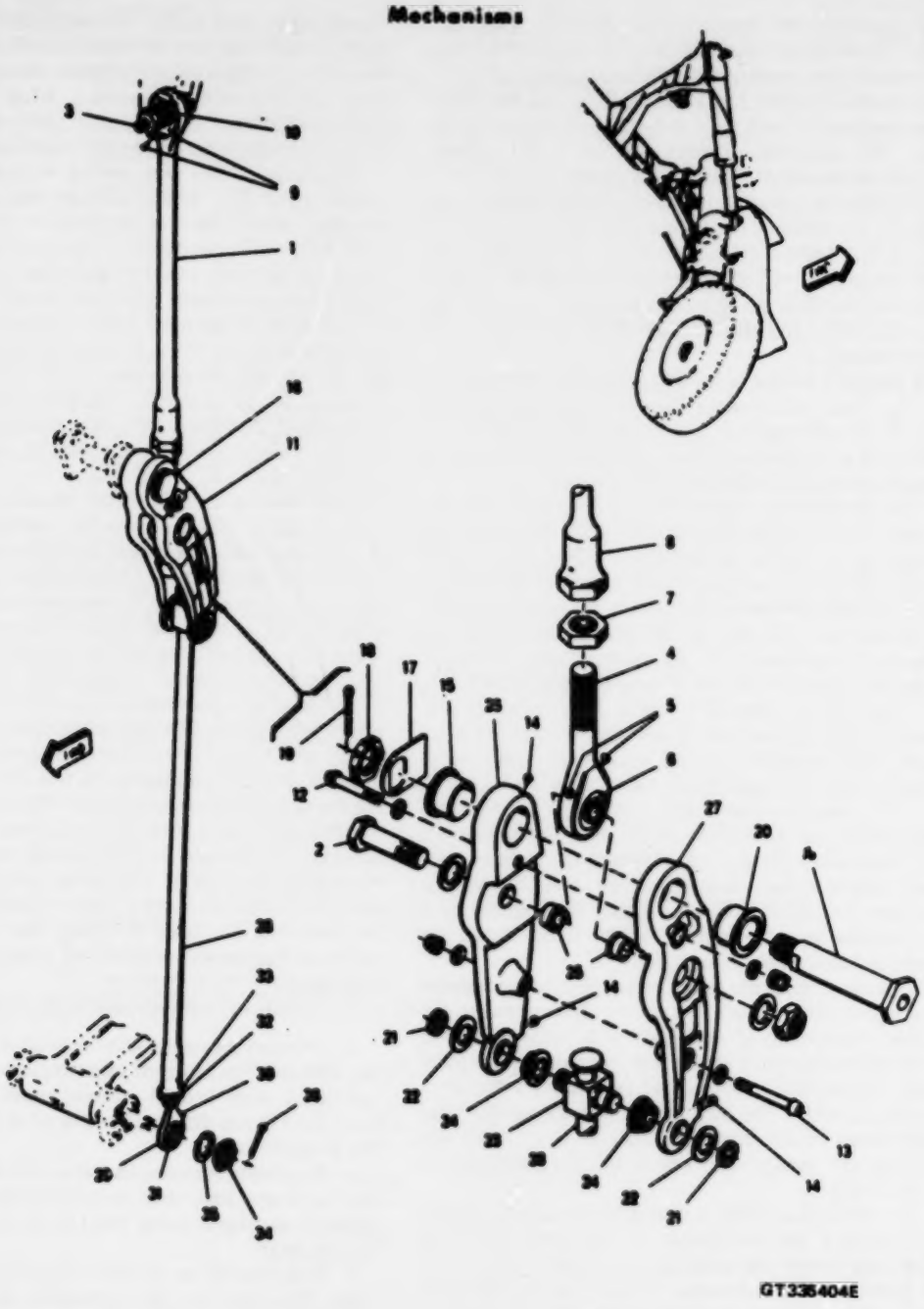


Figure 2–14. IPB figure (extract).

publications. Some TOs are rescinded for Air Force use, but are retained in stock for Security Assistance Program (SAP) use. Publications are not removed from file until they are listed as rescinded in Part II of the appropriate NI&RT.

Exercises (412):

1. What is the purpose of the IPB?

2. What system is used to disseminate military orders of a technical nature?

3. IPBs are normally broken down into what sections?

   Use figures 2-12, 2-13, and 2-14 for questions 4, 5, and 6.

4. What is the source code for part number 53–39303–99?

5. What is the next higher assembly for figure and index number 2–9–12?

6. What is the volume, figure, and index number for part number 53–39307–2?

7. Who acts as the single point of contact for technical publication requirements and distribution for COS activities?

8. What is used to maintain a record of TOs required, received, redistributed, and maintained when the activity maintains one or more TO files?

9. What methods are used to update TOs?

CHAPTER 3

Research and Records Maintenance

YOU NOW KNOW how to take issue requests along with the publications used to research items that aren't loaded. In this chapter, you learn how to load, change, and delete internal records. Many of the work listings you use in your job are kept up to date by the records maintenance unit. These listings and their purposes are discussed in this chapter. There are many times you can use a listing versus an inquiry to prepare your inputs and, for this reason, you need correct and current listings.

3-1. New Item record Load

Several times a day, DPU receives a request for an item with a supposedly good NSN, only to receive a 295 reject saying the item requested isn't loaded. When this happens, the NSN is researched and the applicable data is obtained to load the item to the S1100/60.

413. State the procedures for loading new item records.

item record Load. The new item record load (TRIC FIL) establishes the item record and repair cycle record (when applicable) in the S1100/60.

Support records must be loaded before FIL inputs are processed. A reject occurs if the following support records are not loaded before the item record load:

- Routing identifier record.
- Exception phrase record when the input contains an exception code.
- FSC/MMC record.

New item records are normally loaded, with the exception of special support requirements such as an initial spares support list (ISSL), after a management or reject notice is output indicating that the item record is not in the SBSS Data Base. When you determine that a new item record should be loaded, research the *Stock Number Directory*, stocklists, and other related technical publications to validate the stock number and to determine indicative data, codes, nomenclature, and other information. Then prepare an FIL input on an AF Form 1991, General Purpose Creation. A part number detail record is loaded at the time of the new item record load for all NSN and P serialized numbers that resulted from a part number (P/N) request.

Some item record loads are to satisfy a previous reject condition from another unit or section. When the FIL is input, it may be coded to provide an F304 management notice to the section/unit that has the suspended reject. The notice tells the section/unit that the suspended reject can now be processed.

As requests for item record loads are received, the research unit prepares an AF Form 1530, Punch Card Transcript, or AF Form 1991, TRIC FIL (fig. 3-1). If the research unit has a terminal, you can use the source document for input preparation instead of the AF Forms 1991 and 1530. When the forms are used, normally you prepare them in two copies. Copy one is used for processing and copy two is placed in a suspense file.

Much of the data needed for an item record load is found in the ML–C. To establish an item record load or any other type of input in the S1100/60, you must follow the formats in AFM 67–1. It sounds easy, but if you do not know what the codes are or what they mean, inputs can be very difficult, and you may end up loading erroneous data.

Exercises (413):

1. When are new item record loads normally accomplished?

2. What forms can be used to prepare an FIL input?

3. What publication contains most of the data needed to load an item record?

414. Cite the procedures for researching and ordering noncataloged items.

Noncataloged Items. On occasion, organizations call requests into DPU by part number only. The research unit is responsible for researching these requests to find if the part number converts to a NSN or if it is already loaded by part number.

Prior to starting research, you should verify that the source document contains all of the necessary data elements to complete the research action (i.e., if the TO reference is cited, ensure that the figure and index are included). If a requester has specified that a particular brand or vendor be used, you should ensure that a letter of justification has been submitted.

GENERAL PURPOSE CREATION | TO: ☐ KEYPUNCH ☐ REMOTE | FROM:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
F	I	L	U	6	Ø	A	6	1	1	Ø	Ø	1	1	3	9	2	3	7	5

REMARKS

21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
A	Y	Ø	1	E	A	Ø	Ø	4	7	9	3	6	2	4	F	L	Z	X	D
41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
2	B	Ø	1	S			A	1								F	R	E	Q
61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
U	E	N	C	Y		R	E	G	U	L	A	T	Ō	R					

AF FORM FEB 71 1991

U.S. GOVERNMENT PRINTING OFFICE: 1979 0-632-814

Figure 3-1. New item record load.

Once the source document has been validated, you verify or assign the FSCM by using the H4-1/H4-2. If the request contains a TO reference, use the FSCM cited in the TO. The part number and the FSCM are screened against the MCRL-1 in an attempt to convert the part number to an NSN. If more than one NSN is listed for a single part number and FSCM, use the FSC as a guide. Prior to assigning an NSN, you verify the description of the requested item to ensure that they're the same.

Part number requests that do not convert to an NSN are screened against the non-NSN control file of DD Forms 1348-6 to determine if a part number record has already been established. If an item record had been previously loaded, you verify that it is still loaded and advise the initiator (i.e., DPU, Receiving, etc.) to reinput. If the part number has not been loaded, you verify that it has not been converted to an NC (pending NSN assignment), ND (no further demands anticipated), or national stock number. This verification is accomplished by researching Stock Number Directory (M14) postings, document and transaction registers, etc. If the part number has been converted, you advise the initiator of the correct stock number to use.

If a part number converts to an NSN, however, that NSN is not listed in the ML-C, it is known as nonstock listed (NSL). You screen the NSN against the SL-ISG to determine if a valid (stock listed) replacing NSN is contained within the I&S group. If the NSN has not been replaced, you order by part number. If after thorough research, the part number cannot be converted to a valid stock number, a DD Form 1348-6, Non-NSN Requisition (Manual), is prepared.

DD Form 1348-6. If the request is for a non-NSN item and is submitted by other than voice communication, the requesting activity initiates the DD Form 1348-6 in four copies and sends it with the issue request to DPU (fig. 3-2). The requesting activity completes the form to the maximum extent possible. The research unit prepares a DD Form 1348-6 on all expedite call-in requests for L, P, NC, ND, and NSL items. If technical data is not available or the item is difficult to describe, the organization may be requested to furnish a photograph or drawing of the item. Figure 3-2 shows a DD Form 1348-6 and how it is filled out by the initiator.

(1) DIC/TRIC Code—Left blank by the initiating activity. Used by Stock Control on wash post requests and on requisitions submitted to the source of supply. TRIC ISU is assigned by DPU only if the requested item can be identified to an NSN or local stock number.

(2) Routing Identifier—Left blank by initiating activity and is determined by DPU. The routing identifier code assigned to a noncataloged item is based on the policy specified in AFM 67-1, Volume 1, Part 2, Chapter 2, Section B. If the noncataloged item is listed in a weapon or systems technical order that is source coded for central procurement, or is not source coded, you assign the Air Force (FxZ) routing identifier of the TO or system manager at the applicable Air Logistics Center (ALC). Other noncataloged items that cannot be related to Air Force-managed items are assigned a routing identifier code of JBB (local procurement) or JBD (local manufacturer).

(3) Part/Stock Number—Left blank by initiating activity. Stock Control enters the manufacturer's code and part number. This position of the form is left blank when the part number exceeds 10 positions or the manufacturer's code is unknown (ZZZZZ). When an NSN is known, but the Air Force is not a recorded user, the NSN is entered in the Remarks block.

ISSUE/TURN-IN REQUEST

TRIC	DEL DOC SUFFIX	EX	A. INCHECKER, NAME, DATE (TIN)	B. INSPECTOR, NAME-STAMP, DATE (TIN)
I|S|U|B|3|5			Stieber 4578 6Ø99 1Ø15	

REQUESTER, TIME & DATE (TIN)

STOCK NUMBER NSC	STOCK NUMBER NIIN	ADDN	UNIT OF ISSUE	QUANTITY	C.	DOCUMENT NUMBER ACT	ORG	SHOP	DATE	SER. NO.	SUFFIX
			EA	ØØØØØ1		R	253	H|S			N

PART NUMBER	E. T.O. REFERENCE/TECHNICAL PUBLICATION OR END-ITEM APPLICATION/NEXT HIGHER ASSEMBLY
P|5|1|4|2|9|5|-|1|1|3|A	John Smith Catalog #57 pg 957

D. PART NUMBER/MFR CODE OR NAME/REMARKS: 81348

WORK ORDER	TEST	ANZ	WS	PROJECT	PRI	REQ DELIVERY DATE	UJC	MARK FOR	F. T.O. PSC AND/OR ENC
SHIP TO	51	52 53	54 55 56 Ø1	57 58 59	80 81 Ø7	82 83 84	85 86 CZ	DOCUMENT NUMBER / POST/POST 87 88 89 70 71 72 73 74 75 76 77 78 79 80 SHOPWSEZZZ	

G. TIME & DATE OF DELIVERY	H. DELIVERY TIME	I.	J. NOMENCLATURE
			Strainer element

AF FORM JUN 85 2005 PREVIOUS EDITION WILL BE USED. — ☆ U.S. GOVERMENT PRINTING OFFICE: 1984-443-373

DOCUMENT IDENTIFIER	ROUTING IDENTIFIER	M & S	ITEM IDENTIFICATION* (NSN, FSCM/Part No., Other) FSCM	PART NUMBER	UNIT OF ISSUE	QUANTITY	DOCUMENT NUMBER SUFFIX	REQUISITIONER
1 2 3	4 5 6	7	8 9 10 11 12	13 14 15 16 17 18 19 20 21 22	23 24	25 26 27 28 29	30	31 32 33 34 35
(1)	(2)			(3)	(4)	(5)		

DOCUMENT NO. (Cont.) DATE	SERIAL	DEMAND	SUPPLEMENTARY ADDRESS SUPPLY	SIGNAL	FUND CODE	DISTRIBUTION CODE	PROJECT CODE	PRIORITY	REQUIRED DELIVERY DAY OF YEAR	ADVICE CODE	BLANK
36 37 38 39	40 41 42 43	44	45 46 47	48 49 50 51	52 53	54 55 56	57 58 59	60 61	62 63 64	65 66	67 68 69

	REJECT CODE (FOR USE BY SUPPLY SOURCE ONLY)	IDENTIFICATION DATA
70 71 72 73 74 75 76 77 78 79 80	65 66	*1. MANUFACTURER'S CODE AND PART NO (When they exceed card columns 8 thru 22) (6) 81348 514295-113A

2. MANUFACTURER'S NAME (7) John Smith Manufacturing CO.

3. MANUFACTURER'S CATALOG IDENTIFICATION	4. DATE (YYMMDD)	5. TECHNICAL ORDER NUMBER
John Smith Catalog #57	(8) 8602	N/A (9)

6. TECHNICAL MANUAL NUMBER	7. NAME OF ITEM REQUESTED
N/A (10)	Strainer Element (11)

8. DESCRIPTION OF ITEM REQUESTED	8a. COLOR	8b. SIZE
Sediment, cylindrical, both ends open, 50x50 (12) corrosion resistant steel mesh, 0.875" outerdia, 0.009" dia wire, $40.00 EA	N/A (13)	2.88"to 2.92"L (14)

9. END ITEM APPLICATION	9a. SOURCE OF SUPPLY
Water Pump (15)	JBB (16)

9b. MAKE	9c. MODEL NUMBER	9d. SERIES	9e. SERIAL NUMBER
Smith (17)	18695-3	N/A	N/A

10. REQUISITIONER (Clear text name and address)	11. REMARKS
(18)	3415 CMS/MABD SSgt Stieber ext: 4578 (19)

FOLD LINE

DD Form 1348-6, FEB 85 *Edition of Apr 77 may be used until exhausted.* **DOD SINGLE LINE ITEM REQUISITION SYSTEM DOCUMENT** *(MANUAL - LONG FORM)*

Figure 3–2. Sample of AF Form 2005 (issue request) and DD Form 1348–6.

(4) Unit of Issue—Left blank by initiating activity. DPU places the proper unit of issue in the lower margin of the Remarks block.

(5) Quantity—To be completed by the stock control section from the accompanying AF Form 2005, Issue/Turn-In Request.

(6) Manufacturer's Code and Part Number—Self-explanatory.

(7) Manufacturer's Name and Address—Enter the manufacturer's name. If more than one, enter on reverse side of form.

(8) Manufacturer's Catalog Identification and Date. If applicable, enter commercial catalog number and date.

(9) Technical Order Number—Enter technical order, figure, and index number.

(10) Technical Manual Number—Enter technical manual number, figure, and index.

(11) Name of Item Requested—Self-explanatory.

(12) Description of Item Requested—Enter a complete description of the item, the first 19 characters being the most pertinent descriptive data recommended for stock number directory purposes. Abbreviations may be used, but common commercial terms should be used. Be realistic and use identifiable purchase descriptions. Use the Remarks block if the description is too long for this block. If the description is too long for blocks 8 and 11, use block 8 and attach a separate sheet. Include the unit price, if known, and an allowable tolerance.

(13) Color—Self-explanatory.

(14) Size—Self-explanatory.

(15) End Item Application—What the item will be used for.

(16) Source of Supply. Self-explanatory.

(17) Make. Self-explanatory.

(18) Requisitioner—Left blank by initiating activity. DPU enters the organization's name and proper address.

(19) Remarks—Enter organization identification, initiator, and telephone number. For locally procured items, the using activity is responsible for identifying safety standards, specifications, constraints, or hazards.

When filling out the Description block, you should try to answer the following questions.

a. What is it? Did you start the description with the proper noun?

b. What is it made of? Paper, wood, steel, aluminum, plastic, etc?

c. What are the critical elements? Shape, size, color, outside diameter, height, length?

d. What are its principal characteristics? nontoxic, technically or chemically pure, high grade, commercial, or construction grade?

e. What does it do? holds, drives, separates, connects?

f. What type of work is it used in? electrical, mechanical, plumbing?

g. How is it used? by itself or with other items?

h. What is it used for? use or purpose?

i. Where is it used? component or end item?

j. Is it recoverable? Can a used item be repaired economically?

Distribution. After the DD Form 1348-6 has been completed, an FIL input is prepared and processed. The DD Form 1348-6 is distributed as follows:

a. Copy one is filed in the research unit.

b. Copy two (and copy three when required by local management) is filed in a central file maintained in the research unit for both nonlocal purchase and local purchase items, or in a decentralized file maintained in the research unit and stock control unit for both nonlocal purchase and local purchase items.

c. Copy four is sent to the requesting activity as determined locally.

Maintenance. The DD Form 1348-6 serves as a control and reference file for the establishment of records to support noncataloged requirements. A DD Form 1348-6 is accomplished and maintained for every L, P, NC, and ND item loaded in the account.

A master file kept in the research unit contains at least one copy of the DD Form 1348-6 processed. Part numbered items (P in fifth position of stock number) are filed in part number sequence without regard to the FSC. All other DD Forms 1348-6 are filed in stock number sequence (same sequence as the Stock Number Directory). MAJCOM can change the filing sequence.

New requests for non-NSN items must be diligently screened against the master file before further processing. This is to preclude the assignment of new serial numbers to identical items already established in the account.

The non-NSN control ledger is a ledger used to assign six-digit serial numbers to L- and P-type stock numbers. The ledger is in serial-number sequence and must include the following data.

a. Serial number and assigned FSC.

b. Part number (for P serialized numbers).

c. FSCM (for P serialized numbers).

d. Brief description.

e. AF Form 86, Request for Cataloging Data/Action, and control number (if required by local management).

f. Date of deletion which is only needed if you're reusing the serial number before reaching the maximum 999999.

For bases operating under CIAPS, customer integrated automated purchasing system, a CIAPS item listing may be used to replace the local purchase item portion of the DD Form 1348-6 file. DD Forms 1348-6 waiting to appear on the CIAPS item listing, are placed in a temporary file. If the item is deleted from CIAPS but remains active in the SBSS, a DD Form 1348-6 is prepared for the file.

Exercises (414):

1. Before researching a part number request, what should you verify?

2. When using the MCRL-1, what is used as a guide if there is more than one NSN listed for a single part number and FSCM?

3. What do you screen part numbers against to find if a part number record is already loaded?

4. What can you research to verify that the part number has not been converted to a stock number?

5. What are NSNs that are *not* listed in the ML–C known as?

6. What is prepared when a part number does not convert to an NSN?

7. What serves as the control and reference file for the establishment of records to support noncataloged requirements?

415. Cite the procedures for loading, changing, and deleting part number detail records.

Part Number to Stock Number Conversion. A part number to stock number conversion record, part number detail record, is established to automate the part number to stock number cross-reference file. This record is loaded at the time of a new item record load for all NSN and P serialized (P/N exceeds 10 positions) numbers that resulted from a part number request. It is also loaded when your research reveals an existing item record for the requested part number and a part number detail record is not loaded. This record allows a part number to be converted to a stock number under program control and thus eliminates any external research action.

Loading part number detail records for part number stock numbers (P stock numbers) that are not P serialized numbers is an option. The detail is only required if it is needed to identify a specific user/end item application. P stock numbers already exist on the item record (i.e., P/N 830C, connector appears as 5935P830C).

When a part number detail record is loaded, it is related to all of the item records in the SBSS Data Base without regard to the system designator. Multiple part number relationships to the same stock number may be established.

Load process. The research unit prepares part number detail record loads (TRIC 1AA) using either an AF Form 1991 or AF Form 1530. Local management determines the number of copies needed. The part number can range from 1 to 32 characters. You must ensure that the input creation is correct as the part number cannot be edited under program control. When several part numbers convert to the same stock number, the part number detail record is loaded to the SBSS Data Base and is related to the applicable item record.

Change process. The records maintenance Unit prepares changes to the part number detail record on an AF Form 1991/1530, TRIC 1AA. To change a part number, the type input flag is a "P." To change the end item application or FSCM, the type input flag is a "C."

Delete process. The records maintenance unit prepares deletions to the part number detail record on an AF Form 1991/1530, TRIC 1AA. You enter the part number in cc 4–35 and the FSCM in cc 36–40 as it appears on the part number detail record. The other data elements can be blank except for cc 80 which contains a type input flag of D.

Exercises (415):

1. Why were part number to stock number conversion records established?

2. When are part number detail records loaded?

3. What TRIC is used to load, change, or delete part number detail records?

4. What activity loads part number detail records? What activity changes or deletes these records?

5. How many characters can make up a part number when loading a part number detail record?

6. Why must you ensure that part number loads are correct prior to processing?

3-2. Item record Maintenance

At some time, you may have heard someone refer to a computer as a mechanical brain. This description may be justified to the limited extent that computers are extremely accurate and make calculations at a fast speed. However, a computer is a machine and only as efficient as the programming, instruction, and data that it contains.

Our discussion in this section deals with the maintenance of item and support records. It is important not only that these records be loaded in the S1100/60 correctly but also that once they are established they are kept current. For example, the gallon of paint bought several months ago for $10 may now cost $12.50. Price adjustments are necessary to keep internal records accurate and up to date.

Maintenance of records is the responsibility of the records maintenance unit.

416. Cite the procedures for maintaining and deleting item records.

Item Record Maintenance. Item records are initially established by the research unit, but the records maintenance unit is responsible for keeping them current. Indicative data making up the item record (i.e., stock number, routing identifier, unit price, unit of issue, etc.) is subject to constant change.

As file maintenance actions are required and acted upon by the records maintenance unit, you prepare either an AF Form 1991 or an AF Form 1530, in the number of copies required by local management. These manually prepared forms furnish data to be input through the terminal or the card reader. The original copy of the input is forwarded to the terminal operator for processing to the S1100/60, or to the computer operations section if the input is restricted to the card reader. The PCAM unit is responsible for keypunching the cards that are processed through the card reader. The second copy of the input is used to update applicable external files and listings before it is placed in a suspense file.

Item Record Changes (FIC). Once an item record has been established, an FIC input is initiated as necessary to change the indicative data on the item record. This input is used to change the stock number, ERRC designator/equipment management code (EMC), routing identifier, and budget code. All item records, regardless of system designator, are changed from this input.

Stock number changes are made only as a result of AF Form 86 action, stock list changes, or to correct erroneous file maintenance data on original FIL inputs. Stock list publications reflect the current indicative data that are registered at AFLC. These changes are sent by AFLC to the SBSS for record updates. This automatic update keeps you from having to update SNUD (stock number user directory) registered stock numbers by an FIC input.

There are actually two types of stock number changes (change and merge). When the *change to* stock number is not in the SBSS Data Base, the change is referred to as a *stock number change*. A stock number change transfers all item, repair cycle, and detail records from the existing stock number over to the *change to* stock number. When the *change to* stock number is already in the SBSS Data Base, within the same system designator, the change is referred to as a *stock number merge*. Stock number merging is different from stock number changing because it involves the linking together of item records, repair cycle records, and detail records. One thing to remember about merging stock numbers is that stock numbers from different stock record accounts cannot be merged. For example; stock number A is equipment and stock number B is supplies. In this instance an ERRC change is required to make the accounts equal.

Item Record Deletes (FID). The records maintenance unit uses an FID input to delete an item record. There are many conditions that qualify an item record for deletion. Having item records in the S1100/60 that are not being used is of little or no value. Such records are taking up valuable storage space in the SBSS Data Base and should be deleted. To keep necessary item records from being deleted, certain program edits must be met. Since item records can be deleted during file status processing (internal delete) or by an external delete, there are two sets of edits programmed into the S1100/60.

Internal deletes. No input is required for internal deletes made during file status processing. An item record is automatically deleted when the S1100/60 detects the following conditions on the item record.

a. The date that the stockage priority code (SPC) of 5 was assigned to the economic order quantity (EOQ) consumption and demand data variance detail record is greater than 730 days.

b. The number of demands is zero.

c. The serviceable balance is zero.

d. The data base key of the next detail is blank, unless the only details are level justification code (LJC) O or EOQ consumption and demand data variance.

e. The date of last transaction is greater than 10 days.

f. Item records which have another asset flag.

g. If a repair cycle (XD/XF) item, the current quarter repair cycle data on the repair cycle record are zeroes.

h. The item is not coded as a master item in an interchangeable substitute group (ISG) and meets the criteria specified in *a* through *g*.

External deletes. When an external decision is made to delete an item record, an FID input is prepared. This input causes the S1100/60 to delete the item record when the following conditions exist.

a. The serviceable field is zero.

b. The demand level field is a blank or zero. To delete item records with other than blank or zero in this field, the FID input must contain a force code (F) in cc 4.

c. The date of last demand (DOLD) was more than 365 days ago. To delete an item record regardless of the DOLD, use force code F in cc 4.

d. The stock number being deleted is not a master with an interchangeable of an I&S group that is loaded in more than one system designator.

e. None of these detail records exist: due-in, due-out, DIFM, excess report received but not billed, shipped but not credited, registered equipment management (REM), adjusted stock level, EOQ consumption, and demand data variance details, except those with an organization and shop code of 007SC.

f. None of these details exist with onhand or authorized quantities: WRM/BLSS spares, WRM/WCDO spares, munitions WRM spares, supply point, WRSK/MSK, and authorized/in-use.

g. A status detail record exists without a matching due-in detail record. (The status detail is also deleted by input of an FID.)

h. For repair cycle items (ERRCD XD and XF), the current quarter data fields are zero. (The repair cycle record is also deleted by input of an FID.)

i. A part number detail record exists and is not loaded in more than one system designator. (The part number detail record is deleted by an FID input.)

j. Item records with a basic NSN cannot be deleted if an active dash stock numbered item record (dash in 14th position following the NSN) is loaded for that NSN.

Miscellaneous Data Loads/Changes (FNL). The records maintenance unit uses a file maintenance miscellaneous data load/change input (FNL) to load/change the item record nomenclature, shelf-life code, quantity unit pack code (for local purchase items), and/or the demilitarization code. The FNL also serves as a trigger card for loading the quantity unit pack conversion table. Each of these data elements is loaded, if available, with the FIL input for a new item record load. When invalid data is input, the S1100/60 produces management notice 302, INVALID DATA NOT LOADED, which tells you that an FNL input is needed.

The descriptive nomenclature (noun) in the item record is limited to 24 characters for L stock numbers and 19 characters for all other stock numbers. Nomenclature inputs may only contain those authorized special characters prescribed by AFM 67–1. The most significant position (first position on the left) must not be numeric or blank. Other exceptions are as follows:

a. An asterisk (*) in the first position of the nomenclature field identifies a locally assigned ERRCD and indicates that correspondence has been sent to or received from the applicable item manager for corrective action.

b. For part-numbered items, you enter 19 positions of the noun and the five-digit FCSM.

c. For local manufactured items, you enter SR (sample required) in the first two positions of the nomenclature field. When the item has been made and the manufacturing activity has samples and/or drawings, you change the SR to SA (sample available). If you know from the start that samples and/or drawings are available, you can initially load SA in the first two positions.

Unit of Issue/Unit Price Change (FCU). The FCU input changes the unit price, unit of issue, and quantity unit pack (except for local purchase items) fields on internal records. These inputs are produced during SNUD processing, through program interface, and by external record maintenance inputs. All records loaded with the input stock number are updated with this one input.

Freeze Code Load/Delete (FFC). A freeze code is loaded on an item record to stop SBSS ADS processing of certain transactions against that item record and associated detail records. Freeze codes are assigned to identify the responsible activity and the reason for freezing the item record. Freeze codes A, B, E, L, Q, R, and S may be loaded or deleted by an FFC input.

Action code L on the FFC input loads a freeze code and action code D deletes the freeze code. Only one freeze code may be assigned to an item record. If an item record is already frozen, a second freeze input will reject.

The records maintenance unit is responsible for ensuring the correct and timely release of all frozen item records, except those with freeze codes C, I, and P. The inventory section is responsible for freeze codes C and I and the retail sales section is responsible for freeze codes D and P. Any time that a delay is experienced (records aren't released within three workdays), the records maintenance unit coordinates with the initiator to ensure that the delay is valid. The cause is annotated on the records maintenance suspense notice.

Exercises (416):

1. What activity is responsible for keeping internal records current?

2. What input is used to change the stock number, ERRCD/EMC, routing identifier, and budget code?

3. Stock number changes are made only as a result of what?

4. What are the two types of deletes and how are they processed?

5. What input loads or changes the item record nomenclature, shelf life code, quantity unit pack, and the demilitarization code?

6. How can you identify an item record with a locally assigned ERRCD?

7. What input changes the unit price, unit of issue, and quantity unit pack?

8. What are freeze codes used for, and what TRIC code is used to load or delete them?

3-3. Interchangeable and Substitution Group (ISG) Records

There are times when items are similar enough that they can be used as an interchangeable or as a substitute item. Interchangeable items do not require modification prior to being used for another item. Substitute items require some type of modification prior to use. This section discusses how ISG items are linked, loaded, changed, or deleted.

417. Cite the purpose and steps for loading, changing, and deleting ISG records.

ISG Records. ISG records are established to identify items with like physical and functional characteristics that provide compatible functional performance. The proper identification of relationships between different types of items allows the maximum use of available assets. The SBSS interchangeable and substitute (I&S) system is designed to provide bases with the widest range of relationships that are suitable for local use. Stock numbers on the SBSS ISG record are arranged in sequence by ISG order code within relationship code: master, interchangeable, substitute, component, next higher assembly, and repair kits.

ISG relationship codes. An SBSS ISG consists of two or more (maximum of 45) items that have a relationship. The relationship code identifies the affiliation between the items. The relationship codes are as follows:

a. Code M identifies the master item that must have the same physical and functional characteristics and must be suitable for local use instead of any interchangeable item within the same ISG. Only one item in an ISG may be designated as the master.

b. Code I identifies interchangeable items that have the same physical and functional characteristics and are locally suitable to be used instead of the master or other interchangeable in the same SBSS ISG. Items identified as interchangeables have a two-way relationship with other interchangeables and the master item and can be used without having to modify the item.

c. Code S identifies a substitute item that can be used for specific functions under certain conditions or applications. Such use normally requires alteration or modification.

d. Code H identifies the next higher assembly that contains the requested item. An item coded H may be a complete end assembly (end item).

e. Code K identifies a repair kit that might be used to restore a requested item to a serviceable condition when no other assets are available.

f. Code C identifies a component part that is manufactured for use in assemblies, subassemblies, end items, or end products when such a part is listed in the blueprint, drawing, technical order, or specification of the respective assembly, subassembly, end item, or product.

AFLC D097 System. The primary source data for establishing SBSS ISGs is the AFLC D097 system. This system provides an automated capability to establish and maintain interchangeable and substitute information for items of supply for which the Air Force has established a user interest. Items which AFLC considers as completely compatible are placed in the D097 J file. Relationships which aren't considered as completely compatible are placed in the D097 X file. The J and X files are published in the SL–ISG. A record of responses to base XXX interrogations is kept in the D097 R file. Data from all three files are sent to all registered users via the stock number user directory (SNUD) in BDS/BVS format.

Establishing Local ISG Relationships. Local relationships and groups may be established for easier usage and requisitioning of items. All requests to load new groups, or load items to existing groups, or delete a stock number from an ISG must be submitted in writing by the using activity to the records maintenance unit. If more than one organization uses the item and a master/interchangeable relationship is being established, the request must be coordinated with the other users prior to submission. To ensure that all using organizations have coordinated on the request, the records maintenance unit screens the consolidated transaction history register for the previous 6 months for organizations having issues or due-outs.

Upon receipt of the correspondence, the records maintenance unit reviews the request and coordination for completion. It also researches the quarterly SL–ISG for a valid relationship. If the requested relationship is valid, you process the ISG load format (TRIC FIS) and destroy the correspondence. If the relationship is not listed in the SL–ISG, the correspondence is filed and kept as long as the ISG relationship is effective. Quarterly, upon receipt of the SL–ISG, this file is screened using the SL–ISG, the Stock Number Directory (M14), and the ISG Listing (R02). The FIS program generates an XXX query card for each master/interchangeable/substitute relationship established for local application.

Changing and Deleting ISG Items. To process a change, you use TRIC FIS. Only one stock number may be processed per input and the ISG number is left blank. Requests for an ISG deletion must be carefully processed to ensure that the desired result is obtained and that the ISG remains the way the initiator wants. TRIC FIS is used to delete ISG items. When an item is deleted and only one stock number remains on the ISG, the remaining stock number is deleted and the group is blanked. If a master is deleted and only one interchangeable remains with some substitutes, the interchangeable is changed to a substitute so that it won't be made the master, via SNUD.

Exercises (417):

1. What is the purpose of ISG records?

2. What was the SBSS ISG system designed for?

3. What is the maximum number of items authorized in a SBSS ISG?

4. What TRIC is used to load, change, or delete an ISG?

5. Where are requests for local ISG relationships sent to?

6. How can you ensure that a request has been coordinated with other base users?

7. If the requested relationship is not listed in the SL–ISG, what steps are taken?

3-4. Support Records

Support records are required in support of transactions processed against item and detail records. These records contain data necessary to complete or record individual transactions as they occur and data required in the preparation of reports. In this section, we discuss the support records maintained by the records maintenance unit.

418. Cite the purpose and steps for loading, changing, deleting, and maintaining support records.

Organization Cost Center Record. As you read in Volume 2, transactions between an organization and Supply cannot be processed until an organization cost center record (OCCR) has been established in the S1100/60. These records are loaded, changed, and deleted by an FOR input. The FOR input may be prepared on either an AF Form 1991 or 1530. All requests for load or delete actions are coordinated with the management and systems branch. This is to ensure that all sections and branches are notified or coordinated with prior to processing the FOR. An output notice is produced from the processing of the FOR and this notice is filed in the OCCR file.

The OCCR file is established at the time that the OCCR is loaded. This file contains the load notice and any changes that have occurred to the OCCR. OCCR files are destroyed once the OCCR is deleted.

The supporting documentation in the OCCR file may be replaced with the applicable page of copy one of the Annual Organization Cost Center Record Review List. Any documentation processed between annual reviews is filed until the next review copy is made available. This file is in organization code sequence.

The annual organization cost center record review list is run at least annually. This list provides the date of last update (DOLU) to help you find inactive organizations. The records maintenance unit attaches a cover letter to the page(s) of the review list and sends it to the applicable organization. The cover letter contains as a minimum: a brief explanation of the action requested, a plain language definition of the data headings, and the name and phone number of a point of contact for answering any questions.

Routing Identifier Record. This record is established and maintained at base level as a documentation record of the processing between the base and the support agency to whom requisitions are forwarded. In addition, it serves to pinpoint difficulties in depot support and excessive pipeline time.

Routing identifier records are maintained for routing requisitions and for storing management data. When a routing identifier record is loaded, MILSTRIP (military standard requisitioning and issue procedures) order and shipping time (O&ST) is stored on the record by Program Control.

The records maintenance unit prepares two copies of an AF Form 1991 or 1530 (TRIC FRI) to load, change, or delete routing identifier records.

Exception Phrase Record. These records are established to control or identify items that are not subject to normal excess, issue, requisitioning, and shipping procedures. The records maintenance unit is responsible for loading, changing, and deleting exception phrase records. This is done by use of FXR inputs.

Every exception code loaded in the S1100/60 has a corresponding exception phrase record, such as: issue only quantities of 1, requisition next higher assembly, or do not requisition.

When processing a transaction against an item record that contains an exception code, one of two things occur. Either the transaction rejects and a notice (the phrase on the exception phrase record) is printed out or the transaction processes and a notice is printed out. The *exception notice code* in the exception phrase determines whether a transaction rejects or processes. The code is "R" if the transaction is to reject and "P" if it is to process.

As we said earlier, exception phrase records are maintained by FXR processing. An exception phrase cannot exceed 35 digits. Exception phrase records are changed the same way they are loaded. You simply prepare the FXR input as if the exception phrase records were not already loaded. To delete an exception phrase record, you enter an action code of "D" in the FXR input.

Shipping Destination Record. These records are used by the shipping program to print address information on the DD Forms 1348–1 for shipments. They are also maintained for each destination to which unserviceable ERRCD XD1 and XD2 items are shipped when the destination is other than the FSC or FSC/MMC unserviceable storage site.

A shipping destination record is kept for each AFLC IM, AFLC unserviceable storage site, Defense Logistics Agency, General Services Administration, and Army excess storage point required for processing at each base. This record may be established for any authorized stock record account number (SRAN) to which frequent shipments (serviceable/unserviceable) are made as a result of redistribution orders and lateral support requests.

Loading and changing shipping destination records is done with FRD inputs by the records maintenance unit. The only way these records can be deleted is by running program GV586, Shipping Destination Record Cleanup. A shipping destination record cannot be deleted if it is required for a repair cycle item.

Standard Reporting Designator Record. The standard reporting designator (SRD) record is used to record the aircraft, end items, or systems assigned to either base or

satellite accounts. This code consolidates the elements of mission, design, and series (MDS) and maintenance equipment classification designator (MECD).

The records maintenance unit loads only those SRDs that are valid and are being supported by the computer support base or a satellite. This support also includes transient aircraft. Loads or deletes (TRIC 1SR) are made to this record upon a request from the mission change monitor.

Annually, the mission change monitor obtains a listing of loaded SRDs and verifies the entries with the requesting organization. All data elements loaded in the record are verified for currency and correctness. Upon receipt of the verified listing, you make any indicated changes or deletes.

FSC and MMC Records. These records identify the Federal supply classes (FSC) and materiel management codes (MMC) that are loaded and/or authorized in each SBSS Data Base. These records are used to route reports and shipments to the correct item manager (IM). FSC and MMC records are maintained for all FSCs and MMCs appearing on item records in the SBSS Data Base.

FSC and MMC record requirements are provided by AFLC as additions, changes, or deletions from the logistics system. This is done through the push of BVL/BDL cards in reply to the submission of a BVA card or a new requirement from AFLC.

The records maintenance unit is responsible for maintaining and monitoring these records. Program GV538, IM Assignments by FSC/MMC, is used to review FSC and MMC records.

Exercises (418):

1. Match each description in column A with the appropriate support record in column B. Each choice may be used once, more than once, or not at all.

Column A		*Column B*
____ (1)	Used to control items that aren't subject to normal excess procedures.	a. Organization cost center record. b. Routing identifier record. c. Exception phrase record. d. Shipping destination record. e. f. Standard reporting designator record. g. FSC and MMC records.
____ (2)	Allows transaction to process between Supply and requesting organizations.	
____ (3)	Used to route reports and shipments to the correct IM.	
____ (4)	Maintained for routing requisitions and for storing management data.	
____ (5)	Used to record the aircraft, end items, or systems assigned to a base account.	
____ (6)	Prints address data on DD Form 1348-1 for shipments.	

2. Match the function in column A with the TRIC code in column B. Each choice may be used once, more than once, or not at all.

Column A		*Column B*
____ (1)	Loads SRDs.	a. FOR.
____ (2)	Changes OCCRs.	b. FRI.
____ (3)	Deletes routing identifier records.	c. FXR.
____ (4)	Loads shipping destination records.	d. FRD.
____ (5)	Changes exception phrase records.	e. 1SR.

3-5. External Records

In most units, an external record file is maintained. Several external files are maintained by the records maintenance unit.

419. State the purpose and types of external support record files.

Organization Effectiveness Report (M24). The indicative data portion of the M24 provides a list that can be kept to reflect the current data on each organization. The annual organization record review list provides the required data for filing in the records maintenance unit, by organization, in place of other supporting documentation. This organization record printout is certified by the organization to show an annual review. It then replaces previously filed supporting documentation.

Routing Identifier Listing (Q05). The Q05 lists routing identifier records in routing identifier sequence. It provides management data, by priority group, on submitted requisitions and followups, status received, and depot/base cancellations. This listing may be used by managers at all levels to check current requisitioning trends and provide data for analysis of depot response to requisitions submitted.

Repair Cycle Data List (Q04). The Q04 provides the maintenance activities with a product that reflects the reparable returns with action taken codes for each repair cycle item. This data is used for reviewing the base in-house repair capability program. It provides the records maintenance unit with a listing of repair cycle records, with indicative codes contained in each record.

Shipping Destination List (R08). The R08 lists reparable destination addresses loaded and used for reparable shipments. It provides addresses of activities for shipment purposes and assists in making file changes that may be required.

Exception Phrase List (R03). The R03 lists exception phrases, by type phrase, in exception code sequence. It

helps management ease the addition and/or deletion of exception codes.

Reporting Organization File (ROF). The ROF keeps track of the equipment used and supported by the Air Force. The ROF identifies each Air Force organization—numbered and unnumbered, assigned or to be assigned—and each wartime additive mission. The ROF reflects the equipment reporting status of each Air Force organization and WRM mission.

The ROF is a master list of active and future programmed Air Force organizations. It also reflects command-created organizations that are required by the various commands to fulfill their mission. These will not appear in the USAF Program, Bases, Units and Priorities (PD). The ROF is used to validate the list of customers/organizations loaded in the SBSS Data Base and to ensure the reporting of equipment authorizations and assets. It contains details and time-phasing of organizations and program changes, and it provides a cross-reference to active and future equipment authorization requirements. The ROF also provides a means of reporting WRM authorizations and assets for wartime additive missions.

Stock Number Directory (M14). The M14 is a listing of item records, within type stock record account code, in stock number and system designator sequence. The M14 is the most widely used listing in the base supply system. The records maintenance Unit uses it to:

a. Screen all system designator totals and ensure that no unauthorized system designators are in file.

b. Check stock numbers with an asterisk (*) before the nomenclature to verify locally assigned ERRCDs.

c. Screen other than normal supply sources for validity. It also provides the capability for Base Supply to function under post-post conditions.

In order to ensure record maintenance accuracy and equalize the workload distribution, the M14 may be broken down into books of consecutive Federal classes; for example: Book No. 1—FSC 1005 through 2590, Book No. 2—FSC 2610 through 4820, etc. These books are kept current by records maintenance personnel as item records are loaded, changed or deleted. Update the M14 as follows:

a. For item record loads, enter at least the stock number and the date loaded between the stock numbers where the new stock number will appear.

b. For changes, draw a single line through the old data and enter the new data above the old.

c. For deletions, draw a single line through the stock number.

The records maintenance unit provides Materiel Control their copy of the M14, after receiving the current monthly listing.

Interchangeable and Substitute Group (ISG) Listing (R02). The R02 is a listing of stock numbers within the ISG in interchangeable and substitute (I&S) number sequence. A separate listing is also prepared in stock-number sequence. This listing contains a cross-reference to the ISG number for each stock number listed.

Exercises (419):

1. What file reflects the current data of each organization?

2. What file provides management data, by priority groups, on submitted requisitions?

3. What file is used for reviewing the base in-house repair capability program?

4. What file provides addresses of activities for shipment purposes?

5. What file lists exception phrases?

6. What file keeps track of the equipment used and supported by the Air Force?

7. What listing contains all item records loaded in the SBSS Data Base?

8. What listing would you use to find if an item has any interchangeables or substitutes?

3-6. External Suspense Files

External suspense files should be maintained in a current status to provide backup data for controlling the input of record maintenance transactions. The records maintenance unit should establish firm cutoff dates so that the SBSS is cleared of all outstanding suspensed documents prior to the preparation of a new work listing and/or end-of-month processing. You should only process emergency or high priority actions after the established cutoff. Suspense documents that can't be processed prior to the cutoff date should be withdrawn from further processing. They should be held for processing during the next month, providing that the new listing doesn't reflect the correct data.

420. State the types and purposes of external suspense files.

File Maintenance Transaction Suspense File. This file contains suspense copies of inputs that alter elements on internal records. This file is kept in the same sequence as that of the altered listing. The completed action notices or daily document register (D04) is compared against the suspense copy to ensure correct processing. If no errors are found, the suspense copy is destroyed if not otherwise needed. If an error is found, you immediately prepare another input to correct the erroneous record.

Stock List Change Suspense File. This file consists of one copy of the listing of all stock list change cards received from AFLC via SNUD (DIC BMx, BV4).

Reject Suspense File. This file consists of rejected inputs that require action by the records maintenance unit. Action is required to correct either the input data or internal record data in order to completely process the input. One legible copy of each reject notice is placed in this file by stock number sequence by transaction date.

Freeze Code Suspense File. This file contains a copy of each freeze code load (FFC) output document or frozen record notice card. It is filed in stock number sequence.

Exercises (420):

1. What are the types of external suspense files?

2. What file contains copies of inputs that alter elements on internal records?

3. Which file consists of rejected inputs that require action by the records maintenance unit?

4. Which file contains copies of freeze code load outputs?

3-7. Stock Number User Directory (SNUD)

Rapid automatic distribution of stock number management data is very important. To help Base Supply keep accurate records, the base initially registers with AFLC as a user in the stock number user directory (SNUD) system—D071. Once the base has established a user interest in any or all particular stock numbers, the need for manual research of reference documents, such as stock lists, stock list change notices, GSA catalogs, and other material has been eliminated for most item records in the S1100/60. Excluded from the SNUD system are Federal supply groups 65 and 89.

421. State basic facts about the stock number user directory.

SNUD Monitor. The records maintenance unit appoints a SNUD monitor who is responsible for monitoring the SNUD add/delete (BDF) cards and for ensuring the daily transmission of these cards to AFLC. The monitor's responsibility also includes processing all stock list change cards received from AFLC to ensure that the internal records are updated properly.

Establishment. The stock control data that is distributed through SNUD originates in the Air Force cataloging system. This data is mechanically provided to the SNUD system for distribution to recorded users of the applicable stock number. Mechanized stock list changes are considered as the authoritative source of stock control data. However, all elements of this data are subject to question by the users of the data.

Input/Output cards. Let's assume that your base just converted to the S1100/60 system. Your first action would be to appoint a SNUD monitor in the records maintenance unit. Next, this monitor submits a master address card (DIC MBA) and a letter of transmittal to AFLC. The MBA card reflects the stock record account number (transaction code A = ADD, D = DELETE), transmission code (tape, cards, etc.), date, and your activity's name and address. After this has been done, the SNUD reconciliation program (GV071) is processed. This program produces either BDFA (add) cards or the card images on tape for all item records in the S1100/60. The cards or tapes are then forwarded to SNUD. Air Force Logistics Command, upon receipt, registers the activity as a user of each stock number submitted and returns current management data automatically to the user.

You have now established an initial buildup between your supply account and SNUD. During daily online processing, as item records are added, deleted, or stock numbers are changed, the programs automatically output SNUD add (BDFA) and delete (BDFD) cards. In addition, as stock list change cards (BMx, BVE, or BV4) received from SNUD are processed, the program outputs a SNUD inquiry card (BVAC09) when the input data doesn't pass program edits. A SNUD delete card (BDFD) is output when the input stock number cannot be located.

The BDFD cards delete the base interest in the item from the D071 system. The inquiry cards (BVAC09) inquire the AFLC Base (D046) system for current stock control data. BFDA cards establish base interest in the item in the D071 system. This causes stock control data to be returned to the base by an automatic interface between the AFLC central systems.

Monthly Stock List Changes. Routine stock control data is distributed via SNUD to recorded users of the applicable stock numbers on a monthly basis. These changes are distributed during the second week of the month prior to the effective date. Catalog management data changes are processed at the close of business on the last day of the month or at the beginning of business the following month.

Annual Reconciliation. Each SNUD participant is scheduled by AFLC to reconcile their SBSS Data Base with the AFLC SNUD file annually. The mandatory schedule

for this annual reconciliation is published in a project SNUD progress report semiannually. Any request for a deviation must be submitted to AFLC through your MAJCOM. As a result of the reconciliation, AFLC deletes user interest in all of the stock numbers for which the submitting activity is a present registered user. AFLC then establishes user interest for the activity for all stock numbers that are submitted in the reconciliation.

Exercises (421):

1. What is the purpose of SNUD?
2. Who is responsible for monitoring BDFA/BDFD cards and ensuring the daily transmission of these cards to AFLC?
3. How often are routine stock control data changes distributed?
4. How often are SBSS Data Bases reconciled with the AFLC SNUD file?

CHAPTER 4

Repair Cycle Support

ONE OF THE MAIN objectives of all the services is to save the taxpayers money by the most economical use of property. The Air Force does this partly through procedures used by the repair cycle support section. Rather than discard equipment that is broken, this section manages the repair of an item until it is either repaired or turned in as unserviceable.

The repair cycle support section has the functional responsibility of providing complete organizational supply support (excluding equipment) to the functional manager; i.e., aircraft/missiles, automotive, civil engineering, communications-electronics armament, and electronics maintenance. This section should be made up primarily of supply personnel who are aware of the problems that face the maintenance activities. This section must be directly responsive to maintenance requirements, problems, and practices.

In this chapter, we discuss repair cycle concepts, management of due-in from maintenance (DIFM) items, turn-ins, awaiting parts (AWP), and supply point procedures. Time change and TCTO requirements, turnaround actions (TRNs), materiel deficiency reports (MDRs), and management of critical items are also discussed.

4-1. Concepts of Repair Cycle Control

The repair cycle support section provides for control of all unserviceable repair cycle items from generation to repair (serviceable) or disposition (not reparable this station (NRTS) or condemned), and obtains maximum benefits from base maintenance activities.

The repair cycle support section controls the entire repair cycle operation. Specifically, this section is responsible for the following.

a. Establishing and operating supply points for onbase maintenance activities.

b. Establishing and maintaining authorization lists for all supply points and supply point items.

c. Maintaining DIFM suspense system data and monitoring delinquent items.

d. Maintaining daily contact with the production scheduling unit or the appropriate maintenance function. This is to ensure the orderly and continuous flow of reparables and that the DIFM delinquency rate is held to a minimum.

e. Initiating inputs to add, change, or delete supply point detail records.

f. Monitoring time change and TCTO requirements.

In addition to the functions just covered, repair cycle support personnel monitor the status of all awaiting parts (AWP) due-ins, request emergency procurement action when appropriate, make a joint determination with Maintenance when all possible action to obtain bits and pieces has failed, and takes appropriate action as determined by Maintenance.

422. Cite the basic facts about repair cycle assets.

Repair Cycle Management. Repair cycle assets are items with an ERRCD of XD or XF. The repair cycle of an item normally begins with the removal of the unserviceable or suspected unserviceable item from an aircraft or item of equipment, and a demand placed on Base Supply for a serviceable replacement. These requests contain demand codes N, R, T, or U, and activity codes C, X, R, or S. Processing a replacement issue request for a repair cycle item can result in either an issue or a due-out to the requesting maintenance activity and the simultaneous establishment of a DIFM detail record. Control of the reparable item in Maintenance begins with the issue or back order of the DIFM item, and does not end until the item is physically returned serviceable or unserviceable to Base Supply for disposition.

Repair cycle items fall into one of two categories: those stocked in Base Supply and those stocked in supply points. Supply point assets are repair cycle items that belong to Base Supply but are stocked physically near the user.

DIFM Details. When a repair cycle asset is issued or backordered as a replacement, a due-in from maintenance (DIFM) detail is established. This means that the requester owes Base Supply a like item (either in serviceable or unserviceable condition). Normally, it is a one-for-one exchange.

For the most part, DIFM issues should be for a quantity of *one* each. For items such as tires or matched sets, multiple quantities may be more advantageous. A multiple DIFM flag is loaded to the item record that allows multiple quantity requests to process. The multiple DIFM quantity edit is only performed when the input issue request results in a DIFM detail being established. In most cases, when multiple quantities are needed, it is better to submit a separate request for one each. This reduces handling and paperwork problems when processing the removed items through the system. When a multiple DIFM issue occurs and various actions are taken on the return, a separate turn-in is processed for each action taken code. For example, if four tires are ordered on one document, there is a good

possibility that they'll all be condemned. However, if you order four circuit boards on one document, there is a chance that two might be returned to a serviceable condition and the other two might be condemned. Also, the duplication of document numbers can result in difficulty in tracing the transaction history records of the SBSS Data Base, if required.

When an issue request results in the issue of a DIFM item, a firm DIFM detail is established. A firm DIFM detail is identified by a DIFM status flag of 0. The delivery destination code from the input issue is stored in the DIFM location field of the DIFM detail. If the delivery destination is blank, the delivery destination is taken from the Organization Cost Center Record (OCCR).

When an issue request results in the backorder of a DIFM item, a memo DIFM detail (DIFM status flag 1) is established. With the exception of AR/BR requirements, status OAM (retained on system) is stored in the status code field of the DIFM detail. The due-out release of the backordered item changes the DIFM status flag from 1 to 0 on the DIFM detail.

Credit DIFM details (DIFM status flag 2) are created as a result of the turn-in of a DIFM item prior to the receipt of the replacement. For example, an organization requests a circuit card that is backordered. It has been determined that the circuit card cannot be repaired at base level and the item is to be NRTS (not reparable this station) back to depot. Rather than waiting for receipt of the replacement item, it is better to turn the item in so the item can be sent out to depot. This way, the item can be repaired and returned to the field faster.

Exercises (422):

1. What ERRCDs identify repair cycle assets?

2. When is a DIFM detail established?

3. In what quantity are DIFM items normally requested?

4. When requesting multiple quantities on a DIFM issue, what must be loaded to the requested item record?

5. When does the repair cycle of an item begin and end?

6. DIFM status flags identify different types of DIFM details. What are the flags for each of the following?

   a. Firm DIFM detail.

   b. Memo DIFM detail.

   c. Credit DIFM detail.

4-2. DIFM Management

It is important that you exercise absolute control over repair cycle items. Constant surveillance of the entire repair cycle operation must be maintained by personnel working in the repair cycle support section and personnel working in the maintenance activities. This surveillance ensures that unserviceable repair cycle items are not allowed to accumulate, pending the receipt of tools, parts, technical data, or authority to repair.

Due to the increased costs of weapon systems and the spares needed for their support, you cannot allow reparable assets to fall out of your control. Aggressive action is needed when controlling DIFM items. The best tool you have for controlling DIFM items is the DIFM listing (R26).

423. State the purpose and use of the DIFM listing and DIFM change cards.

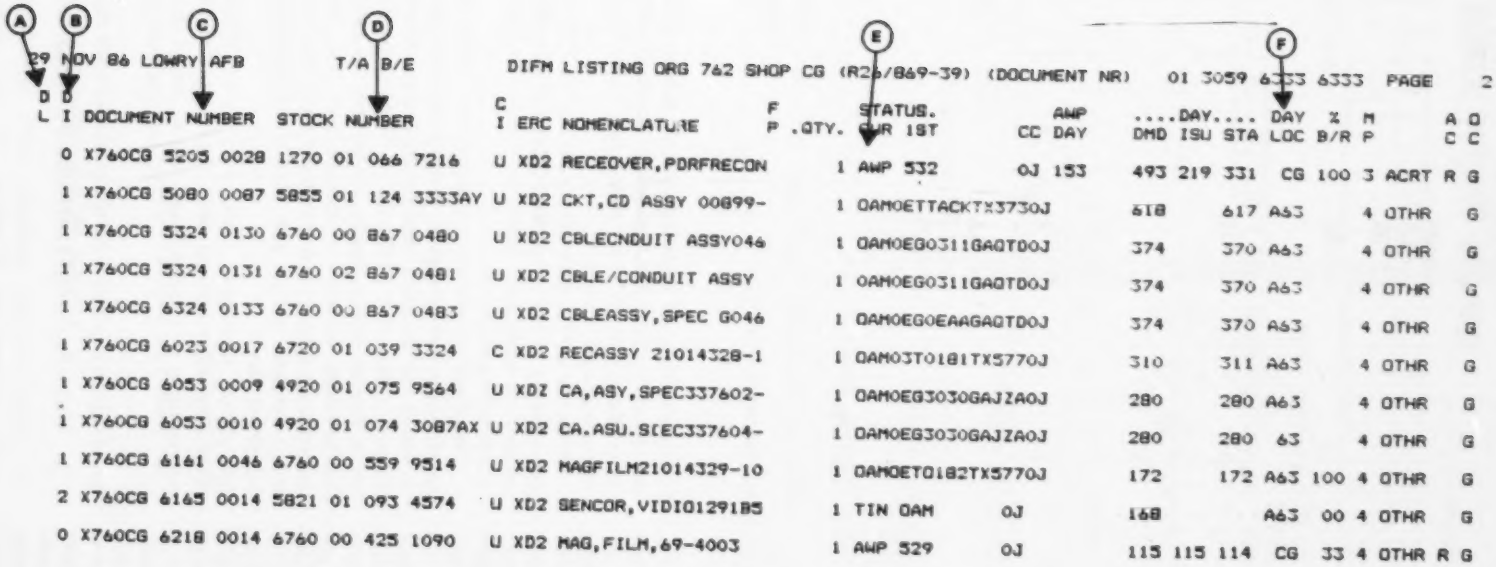
DIFM Listing (R26). The DIFM listing (fig. 4-1) is used to manage DIFM assets, maintain a current inventory of DIFM assets, and to reconcile DIFM detail balances with the applicable maintenance activities.

Column DL contains the delinquent flag that is an asterisk (*) when the DIFM item becomes delinquent. Delinquency is based on the type of detail (memo or firm) and the type of status assigned. STATUS CUR reflects the current status of the DIFM item (i.e., OAM-retained on system, AWP-awaiting parts, AWM-awaiting maintenance, etc.). STATUS 1st reflects the first prior status to the current status. For example, while a bit and piece is on order for an end item, the current status would reflect AWP. When the bit and piece due-out releases, the current status changes to FWP and status code AWP is reflected under the first status.

The R26 is the most important tool for controlling DIFM items. By keeping it up to date with the current status and location, you can reduce the number of delinquent DIFMs.

DIFM Delinquency. Once a DIFM item issues or due-out releases, a like item must be turned in within a set amount of time. Otherwise, the item is considered delinquent. Delinquent items are identified by an * in the DL column of the R26. Items with an ERRCD of XD1 or AFLC critical items have a delinquency criteria of 6 days. The other items use a delinquency criteria of 9 days. Refer to figure 4-2 for an explanation of the status codes and their assigned delinquency criteria.

Memo DIFM details can become delinquent based on their status. For instance, if a bit and piece is ordered against a memo DIFM detail, the status is AWP. When the bit and piece comes in, the status changes to FWP. You have three days to change the status or the detail is reflected



(A) AN * APPEARS IN THIS COLUMN IF THE DIFM IS DELINQUENT.

(B) TYPE OF DIFM INDICATOR (0 - FIRM, 1 - MEMO, 2 - CREDIT).

(C) DIFM DOCUMENT NUMBER.

(D) STOCK NUMBER OF THE DIFM ITEM.

(E) CURRENT DIFM STATUS.

(F) CURRENT DIFM LOCATION.

Figure 4–1. DIFM listing (extract).

Status Code	Meaning	Delinquency Criteria (Days)
BLANK	No Location Established	03
AWF	Awaiting Testing	09/06
AWI	Awaiting Installation	09/06
AWM	Awaiting Maintenance	09/06
AWP	Awaiting Parts	03
AXC	Aircraft Cross Country	09/06
CEH	Scheduled Work Order Item in BCE Holding Area	NA
CTE	Contract Maintenance (Equipment)	NA
CTR	Contract Maintenance/Technical Repair Center	60
FSP	Intransit From Forward Supply Point	09/06
FIL	Flightline	03
FWP	Previous AWP Item Ready For Scheduling and Repair	03
INO	Intransit Issue (Offbase Only)	03
INR	Intransit Return (Offbase Only)	09/06
INW	In Shop(In work)	09/06
MTM	Maintenance-to-Maintenance	09/06
OAM	Retained on Sysytem	03
RFS	Warehouse Refusal/Organizational Refusal	03
RPR	Repair and Return	09/06
TCG	Time Change	15 (20 Overseas)
TIN	Turn-in to Supply	09/06
TNB	Tail/Registration Number Bin	09/06
TOC	TCTO Required for End Item	09/06
VHM	Vehicle Maintenance Work Order Holding Area	NA

Figure 4–2. DIFM status codes and their delinquency criteria (extract).

as delinquent on the R26. As a DIFM monitor, you need to have a good understanding of the R26 and the different status codes that can be used.

DIFM Change Cards. DIFM change cards (TRIC DFM) are produced by the R26 program. The DFM cards provide the capability for updating the responsible repair shop code, DIFM location, and DIFM status code on the DIFM detail. The DFM card input should be used only to update memo and firm DIFM detail records (DIFM flag indicators 0 and 1). When the only DIFM detail in the SBSS Data Base is a credit detail (DIFM status indicator 2), the DFM input is accepted by the S1100/60, but there is no resulting update of the DIFM detail.

Each time an item is received in a shop, or the status changes, the shop scheduler initiates action to update the DIFM detail record. When the status changes from or to AWP, TWP, MWI, INO, INR, FWP, CEH, DWP, or VHM, quick action should be taken to update the DIFM detail record, as AWP time is internally computed, based on these status changes.

You may process DFM inputs through the main card reader, or you may key them in through the terminal. When you make an input through a terminal, an I006 management notice (INPUT ACCEPTED) is printed to release the input device. This management notice also contains the phrase NO UPDATE if the input did not result in an update to the DIFM detail. Updated data resulting from input of DIFM change (DFM) cards appears on the next DIFM listing processed.

For example, if an item that is currently awaiting maintenance (status AWM) is going into repair, the current status should be INW (in shop). See figure 4-3 for an example of a DFM input.

When the DIFM status field is changed to CTR, an I125 management notice is printed. This notice reflects the number of assets that should be repaired, based on the computed requirements.

The repair cycle support section is responsible for coordinating with the applicable maintenance organization to ensure that the DIFM status and location are updated as changes occur. The DIFM listing (R26) helps the repair cycle support section ensure 100-percent followup on all DIFM items located in Maintenance. The applicable maintenance activity is responsible for providing the repair cycle support section with accurate item location and condition status.

Exercises (423):

1. What is the purpose of the R26?

2. What tells you that a DIFM detail is delinquent?

GENERAL PURPOSE CREATION								TO: ☐ KEYPUNCH ☐ REMOTE						FROM:					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
D	F	M					1	2	8	Ø	Ø	Ø	Ø	7	Ø	1	Ø	2	1
REMARKS																			
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
				Ø	Ø	Ø	Ø	1	X	7	4	7	F	L	6	1	3	5	Ø
41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Ø	5	4												Ø	1				
61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
		I	N	W															

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Figure 4–3. DIFM detail change card.

3. What is the most important tool for controlling DIFM items?

4. Within what time period does an XD2, nonAFLC critical item have to be turned in?

5. What are DFM cards used for?

6. What ensures 100-percent followup on DIFM items located in maintenance?

4-3. Supply Point

A supply point is a small warehouse within the maintenance organization where selected repair cycle items are stored. In this section, you discover how supply points are established and operated.

424. State the procedures for establishing a supply point and how supply point codes are assigned.

Establishment. The operation support officer, in coordination with the applicable maintenance control officer or other appropriate organization managers, may establish a supply point. The supported organization provides sufficient space and facilities to accommodate supply points. Supply points may also be established for conventional munitions.

Supply point stocks should be located within or adjacent to the supported activity. Items stocked in a supply point are normally peculiar to the needs of the activity being supported. However, items common to more than one maintenance function may be stocked in a supply point. When a repair cycle item is selected for stockage, all authorized interchangeable items must also be stocked in the supply point. Equipment items (ERRCD NF or ND) are not authorized for stockage in a supply point. Economic order quantity (EOQ) items (ERRCD XB3) may be stocked as supply point items when authorized by the operations support officer.

There are two methods of accounting for supply point assets (except for EOQ assets stored in a supply point):

(1) When the organization supported by the supply point is the sole user and storage space permits, the total authorized base stockage objective may be stocked in the supply point. When this concept is used, supply point personnel receive, store, and issue property in the same manner as storage and issue section personnel.

(2) When the organization supported by the supply point is not the sole user and only a portion of the authorized base stockage objective is maintained in the supply point, the quantity authorized for stockage and the onhand balances should be recorded on a supply point detail. When supply point details have not been established, the supply point is considered a reserve location, and the prime location is so indicated.

Supply point details are loaded, changed, or deleted by the input of a FSP. When only a portion of the stockage objective is kept in a supply point, supply point details are used to account for the authorized supply point quantity.

Supply Point Codes. These codes are used to identify on or offbase supply points from which an issue or turn-in request was received. The code occupies the fifth and sixth position of the organization document number. Such codes are locally assigned and constructed as follows:

a. Use organization code 005 and shop codes 01 through 99 for specific onbase supply points. Because of the method of computing terminal numbers, only shop codes 01 through 10 are authorized terminal functions.

b. Use organization code 005 and shop codes 0A through 9I to identify all supply points that are considered as off-base activities. These consist of all supply points located away from the computer support base or satellite location that rely on mail or off-base shipments for support. Additionally, organization codes 500 through 599 must be loaded with the applicable mailing address to be used for shipments to off-base supply points. The offbase supply point code must correspond to the last two numbers, tens and units, of the assigned organization code (i.e., organization code 517 would be supported from a supply point code of 1G, G being the seventh letter). Only alpha codes A through I are used in the low-order position of the offbase supply point code. Since there isn't an alpha character that corresponds to a numeric 0, organization codes 500, 510, 520, 530, 540, 550, 560, 570, 580, and 590 cannot be assigned. This relationship is required to make easier program assignment of mailing addresses to off-base supply point shipment. You must ensure that this code is assigned to the organization records of off-base supported activities.

Issue (Transfer) to a Supply Point. Initial stockage and replenishment of a supply point is accomplished by submission of an AF Form 2005, Issue Request (TRIC ISU). This transaction is identified as a transfer of stock, and it does not update demand data or consumption elements. Accountability and control of assets on supply point details is maintained by Base Supply. The supply point is just another warehouse location. The use of issue procedures provides the method of transfer and causes requisitioning action if desired. This transaction may be input by the terminal function or the RPS/main card reader.

You should remember that each time an issue from a supply point occurs, you submit a transfer request for replenishment of the supply point. However, when stockage conditions of a supply point permit, you may prepare a transfer for multiple quantities and submit it as required.

A request for issue (transfer) to a supply point is submitted with an activity code of S, organization code of 005, shop code (applicable supply point code), and demand code N.

A request for issue (transfer) to a supply point must be for the stock number and system designator of the authorized item. Requests that are processed post-post will process for any stock number in the ISG of the authorized item. An exception to this rule is recapped tires (dash two stock numbers). Post-post issues for recapped tires bypass the ISG edit when processing.

The issue request (transfer) is satisfied on the input stock number if assets are available. If the request cannot be satisfied on the requested stock number, the program attempts to satisfy the request from interchangeable assets. When an interchangeable item is issued (transferred), the program establishes a substitute supply point detail as required.

When the request cannot be satisfied, a memo due-out is established if the request is not for a recapped tire, using either fill or kill (TEX code 4). You may use a TEX code 2 or K when a need exists to exceed the authorized quantity.

Exercises (424):

1. Establishing a supply point is a coordinated effort of Maintenance and Supply. What are the functions of Maintenance in this operation?

2. When can XB3 items be stocked in a supply point?

3. What input is used to load a supply point detail?

4. What organization code identifies a supply point transaction?

5. What shop codes identify onbase supply points? Of these, which are authorized terminal functions?

6. The 423d Radio Relay Squadron, whose organization code is 545, is supported by an off-base supply point. What is the shop code of the supply point?

7. You have just established a new supply point. The AF Form 2005 has been submitted for the issue (transfer) of property to the supply point. Who maintains control of assets on the supply point?

8. Requests for transfer are submitted with what activity code, organization code, and demand code?

425. Cite the procedures for supply point issues to an organization.

Issue From a Supply Point. When you are issuing an item from a supply point detail, you prepare an MSI input on an AF Form 2005 (fig. 4-4). As you learned earlier, a supply point is a small warehouse within the maintenance organization with the purpose of supporting the maintenance activity. There are two methods that you may use when you are issuing from supply point details.

(1) To issue the item from the detail with no replenishment action, use TEX code F in cc 54 of the MSI request.

(2) To issue the item from the detail, replenish the detail, and/or establish a due-out detail, leave card column 54 of the MSI request blank.

Each supply point maintains a locally devised informal serial numbered log, using numbers 0001 through 9999. When 9999 is assigned, the log is started over, beginning with 0001. The purpose of this log is to assign sequential serial numbers to cc 36–39 (document number date field) of each issue from the supply point. This technique permits multiple issues of a single DIFM item during 1 day's processing.

All issues from a supply point are over the counter. When a demand is placed on a supply point and the item is available, you select the item from the bin and prepare an issue request with TRIC MSI, activity code S, and the organization and shop code of the requesting activity. Card columns 72 through 80 must contain the organization code, shop code, and the serial number of the supply point detail. The serial number of the supply point detail corresponds to the bin number of the supply point item. If a terminal function is available at the supply point, the issue document (TRIC MSI) is returned to the input terminal function. Supply points operating without a terminal function (or if the terminal is inoperative) process the issues as post-post, with a TEX code of 6.

Exercises (425):

1. What TRIC is used to issue an item from a supply point detail?

2. What action is taken when you want to issue an item from a supply point detail with no replenishment action?

3. What is the purpose of the supply point serial numbered log?

4. What are issues from a supply point considered to be?

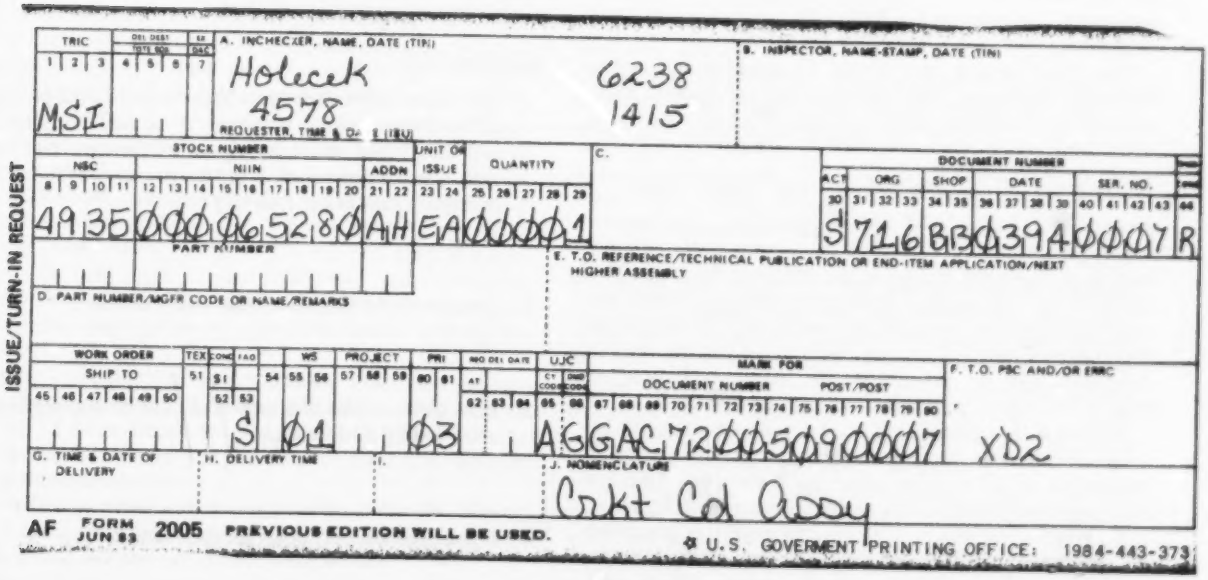


Figure 4–4. Issue from a supply point detail.

5. How are issue requests processed by those supply points without a terminal function?

4-4. DIFM Turn-ins

DIFM items are processed through the repair cycle support section for turn-in after repair action has been accomplished.

426. State the procedures for DIFM turn-ins.

Turn-ins to the repair cycle support section. DIFM items are turned in along with an AFTO Form 350, Reparable Item Processing Tag, and copy 3 of the original issue or due-out release document. These are picked up from on-base maintenance reparable processing centers (RPC) by either the pickup and delivery section or the repair cycle support section, as determined by the COS. The supply representative acknowledges receipt of turn-ins by signing and dating copy 4 of the original issue or due-out release document. This signed copy is retained by the maintenance RPC to verify that the property has been returned to Base Supply. Non-DIFM assets turned in to clear DIFM details are processed in the same manner as bonafide assets.

The repair cycle section is the most preferred location for processing DIFM turn-ins. At the option of the COS, however, the receiving section may be designated as the turn-in location.

The repair cycle support section reviews the documents that accompanied the property for completeness and compatibility. Any entries that are questionable or incomplete on the AFTO Form 350 are coordinated with the applicable maintenance RPC for clarification and correction.

You must ensure that block 16 contains the same document number as found on copy 3 of the original issue or due-out release document. Block 20 must contain an authorized action taken code that is compatible with the condition of the property.

Three copies of an AF Form 2005 (TRIC TIN) are prepared for each DIFM turn-in processed. The turn-in request is processed by either the repair cycle support section or receiving section at the option of the COS. The AFTO Form 350 remains attached to the item inside the container when not reparable this station (NRTS) action has been taken. Copy 3 of the original issue or due-out release document may be retained by the repair cycle support section for local management, or it may be destroyed.

Turn-Ins to a Supply Point. Turn-ins are accepted by supply points only when the property is serviceable and is required to satisfy existing supply point due-outs. Turn-ins accepted under these conditions are processed as follows:

a. When a terminal is available, an inquiry is processed to determine whether a firm due-out exists to an organization other than a supply point. When you determine that such a due-out exists, the property and documentation is delivered to the receiving section for normal turn-in processing. If a terminal is not available, the supply point representative coordinates with Stock Control to determine whether the property is required to satisfy other due-outs. Off-base supply points may process turn-ins without regard to due-outs for activities located on the host base. This procedure is intended to minimize transporting property to and from offbase locations.

b. Turn-ins to supply points may be input through any available terminal and all output documentation is printed back to the input device.

c. An input rejects when the turn-in quantity is greater than the quantity due-out on the document number contained in cc 67–80. When this happens, you may split the quantity and process it on multiple turn-ins, using the same document number found on the original issue or due-out release document. The turn-in for the quantity required to satisfy the supply point due-out is reinput. The remaining quantity is forwarded to the receiving section, together with all copies of the AF Form 2005 prepared for that portion of the quantity that was split.

d. Turn-ins that are not rejected are processed on the initial input and cause the printing of an output DD Form 1348–1 in turn-in format, which is immediately followed by a DD Form 1348–1 in due-out release document format.

e. Copy 1 of the due-out release document is signed by the supply point representative, attached to copy 1 of the AF Form 2005, and then forwarded to the repair cycle support section with the AFTO Form 350 and copy 3 of the original issue or due-out release document. Turn-in requests prepared by the supply points contain all of the required entries, including blocks A (in-checker's name and date) and B (inspector's name or stamp and date) before they are forwarded to Document Control.

f. Finally, you must coordinate with the repair cycle support section and/or activity returning the property for the assignment of transaction exception codes or other actions required to correct reject conditions.

Exercises (426):

1. You had a DIFM item that was picked up by the pickup and delivery section. However, a "foulup" occurred, and the pickup and delivery section insisted that the item was not picked up. What do you have as proof of pickup by Pickup and Delivery?

2. Along with the property, what else is turned in?

3. How many copies of a turn-in request do you prepare, and what TRIC do you use?

4. When does a supply point accept a turn-in?

5. You have just received an item to be turned in serviceable to a supply point. You have no terminal function. How would you determine whether a due-out exists for the item?

4-5. DIFM Reconciliation

As a method of verifying that all DIFM and supply assets are accounted for, a quarterly reconciliation is performed.

427. Cite the procedures for DIFM and supply point reconciliation.

DIFM Reconciliation. DIFM reconciliation is performed at least quarterly or more often at the discretion of the COS. The quarterly reconciliation satisfies the requirement for the out-of-warehouse investment asset inventory of DIFM assets.

A listing of all DIFM details is furnished in document-number sequence for reconciliation of the DIFM suspense file. You should remove from the file and destroy any suspense copies still in the file that are dated as of or prior to the date of the listing, but not on the listing. As each active suspense is verified, it is checked to ensure that any followup action with maintenance is current. You must write or type on a DD Form 1348–1 any DIFM items on the listing that are missing from the suspense file. Contact the organization or activity that was issued the property to determine the location of the asset immediately after you prepare the DD Form 1348–1.

Copies of the appropriate sections of the listing are furnished to each maintenance activity for verification of items that they are processing. Each item in their possession is annotated with the shop name. The annotated listing is sent to the repair cycle support section where action is taken to reconcile any items for which no shop has acknowledged responsibility. The most current reconciliation listing is filed in the repair cycle support section.

Supply Point Reconciliation. Supply point assets are reconciled at least quarterly. The efficiency of the reconciliation is enhanced if at least two of the reconciliations coincide with the semiannual supply point inventory. The repair cycle support section requests a supply point listing (Q13) for the selected supply points. The reconciliation, in addition to verifying assets/requirements status that is shown on the supply point listing, includes a physical count of the assets to verify the balances.

If the reconciliation verifies that the total assets are less than the authorization, the issue (TRIC ISU) cards produced by the Q13 are completed and processed. ISU cards are produced when the onhand plus due-out quantity is less than the authorized quantity.

Verified excesses are turned in to Base Supply. Supply point items are turned in on an AF Form 2005 (action taken code T) and delivered to the receiving section.

Any balance discrepancies are reconciled, using special inventory procedures. The inventory section, along with the repair cycle support section, determines if a discrepancy exists by performing a physical count and conducting required research for all supply point transactions.

Exercises (427):

1. How often are DIFM and supply point assets reconciled?

2. What determines whether or not suspense copies are destroyed?

3. What action do you take when there is no suspense copy of an item that appears on the reconciliation list?

4. Where is the most current reconciliation listing filed?

5. What listing is used to reconcile supply point assets?

6. When are issue cards (TRIC ISU) produced during the supply point reconciliation?

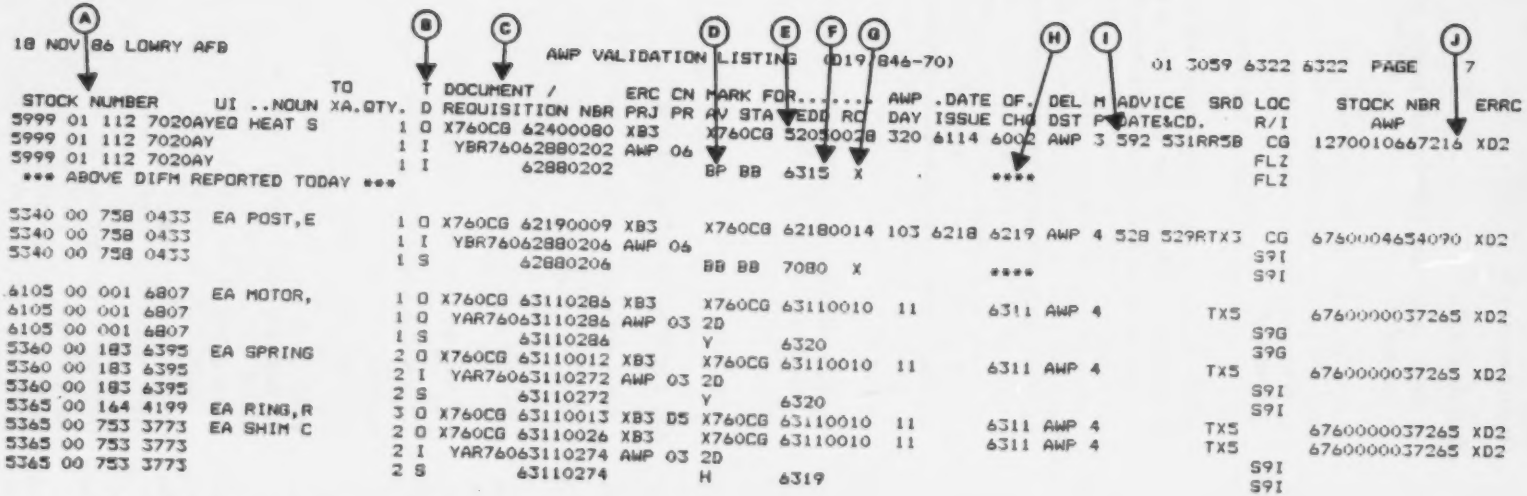
4-6. Awaiting Parts Procedures

When maintenance is trouble-shooting a reparable item, they may discover that the reparable item needs a few replacement parts. These replacement parts are called bits and pieces. The reparable item that is waiting for these bits and pieces is known as awaiting parts (AWP).

428. Cite the procedures for monitoring AWP due-ins.

AWP Validation Listing (D19). Bases submit AWP requisitions for bits and pieces on a fill or backorder basis. The repair cycle support section appoints an AWP monitor. The AWP monitor reviews the entries on the AWP Validation Listing (D19), figure 4-5, for positive due-ins for each due-out, shipment status or realistic estimated release dates, requirement for additional/special action followup, and the feasibility of end-item retention.

The D19 provides the necessary management products to assist in the monitoring of AWP end items. It also produces AWP disposition request cards (DIC XE7) for the applicable ALC. A listing of AWP due-out detail records with their applicable due-in and status details are provided for AWP end items. Totals are accumulated and printed for each system designator for the number of AWP due-out and AWP DIFM detail records. These totals provide supply and



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STOCK NUMBER	UI	..NOUN	TO XA.QTY.	T D	DOCUMENT / REQUISITION NBR	ERC	CN PRJ	MARK FOR..... PR	AV STA	EDD	RC	AWP DAY	DATE OF. ISSUE	CHG	DEL DST	M P	ADVICE DATE&CD.	SRD	LOC R/I	STOCK NBR AWP	ERRC
5999 01 112 7020AYEQ		HEAT S	1	O	X760CG 62400080	XBJ		X760CG	52050028			320	6114	6002	AWP	3	592	531RR5B	CG	1270010667216	XD2
5999 01 112 7020AY			1	I	YBR76062880202	AWP	06												FLZ		
5999 01 112 7020AY			1	I	62880202			BP	BB	6315	X		****						FLZ		
*** ABOVE DIFM REPORTED TODAY ***																					
5340 00 758 0433		EA POST,E	1	O	X760CG 62190009	XBJ		X760CG	62180014	103	6218	6219	AWP	4	528	529RTX3		CG	6760004654090	XD2
5340 00 758 0433			1	I	YBR76062880206	AWP	06												S9I		
5340 00 758 0433			1	S	62880206			BB	BB	7080	X		****						S9I		
6105 00 001 6807		EA MOTOR,	1	O	X760CG 63110286	XBJ		X760CG	63110010	11		6311	AWP	4		TX5				6760000037265	XD2
6105 00 001 6807			1	O	YAR76063110286	AWP	03	2D													
6105 00 001 6807			1	S	63110286			Y	6320										S9G		
5360 00 183 6395		EA SPRING	2	O	X760CG 63110012	XBJ		X760CG	63110010	11		6311	AWP	4		TX5			S9G	6760000037265	XD2
5360 00 183 6395			2	I	YAR76063110272	AWP	03	2D													
5360 00 183 6395			2	S	63110272			Y	6320										S9I		
5365 00 164 4199		EA RING,R	3	O	X760CG 63110013	XBJ	D5	X760CG	63110010	11		6311	AWP	4		TX5			S9I	6760000037265	XD2
5365 00 753 3773		EA SHIM C	2	O	X760CG 63110026	XBJ		X760CG	63110010	11		6311	AWP	4		TX5				6760000037265	XD2
5365 00 753 3773			2	I	YAR76063110274	AWP	03	2D											S9I		
5365 00 753 3773			2	S	63110274			H	6319										S9I		

(A) THE STOCK NUMBER OF THE BIT AND PIECE NEEDED TO REPAIR THE END ITEM.

(B) TD COLUMN IDENTIFIES THE TYPE OF DETAIL FOR THE BIT AND PIECE. 0 IS DUE-OUT DETAIL, I IS DUE-IN DETAIL, S IS STATUS DETAIL.

(C) THE DOCUMENT NUMBER FOR TD 0. THE OFFBASE REQUISITION NUMBER FOR TD 1 AND S.

(D) THE CURRENT MILSTRIP STATUS FOR THE BIT AND PIECE.

(E) THE DOCUMENT NUMBER OF THE END ITEM NEEDING THE BIT AND PIECE.

(F) ESTIMATED DELIVERY DATE OF THE BIT AND PIECE.

(G) AN "X" PRINTED IN THIS AREA INDICATES THAT AN AWP DISPOSITION REQUEST CARD (XE7) HAS BEEN GENERATED.

(H) ****APPEARS IF THE ESTIMATED STATUS DATE EXCEEDS 45 DAYS (CONUS)/60 DAYS (OVERSEAS).

(I) AWP ADVICE CODE AND DATE RECEIVED FROM THE AWP DISPOSITION RESPONSE CARD (XE8).

(J) THE STOCK NUMBER OF THE END ITEM REQUIRING THE BIT AND PIECE.

Figure 4–5. AWP validation listing (extract).

maintenance managers with the statistics for determining the status of the AWP program. The D19 also provides status to the applicable Air Logistic Center on bit-and-piece requirements for all DIFM AWPs.

Supply and maintenance personnel must monitor the D19 to ensure that positive action is taken to return assets to a serviceable condition. These actions may include cannibalization, local purchase, supply difficulty letters, followups, lateral support, etc.

It is highly desirable that you use an AWP checklist for assisting in the establishment of parts requests and for monitoring active AWP requisitions. AWP checklists should include, as a minimum, all of the data pertaining to the end item (i.e., document number, NSN, noun, and ERRCD). To ensure that all actions are properly completed in the AWP requisitioning process, you should answer the following questions.

a. Has research been completed to identify substitutes, interchangeables, or next higher assemblies?

b. Has cannibalization of like AWP end items been attempted?

c. If the requisition is for a part number, is that part number source coded? Does the part number convert to a NSN?

d. Have followups (AFC) or upgrade actions been initiated when needed?

e. Has lateral support been requested when applicable?

f. Has AWP supply assistance or difficulty letters been initiated?

AWP Reporting System. The AWP reporting system was developed to provide an automated exchange of data between Air Force bases and the AFLC Air Logistics Centers. The desire is to encourage the most economical and expeditious repair of assets.

AWP reporting procedures key on the latest status for each item needed to repair the end item in determining the requirements for producing an AWP disposition request card (DIC XE7). Once the XE7 is submitted, the end article item manager (EAIM) responds with an AWP disposition response card (DIC XE8). The XE8 contains an AWP advice code (fig. 4-6) that indicates the actions being taken or required. If the EAIM fails to follow through with the advice provided, another XE7 is produced.

MILSTRIP status programs recognize AWP due-in details based on an S in the requirement flag field. As these due-ins are updated with the most current status, a comparison is made. If the estimated ship date (ESD) is greater than 45 days stateside and 60 days overseas, a flag X is stored in the reconciliation field of the status detail. The X indicates that AWP reporting procedures apply (generation of XE7 cards).

Whenever an XE7 card is produced, the AWP advice code is set to R and the transaction date is entered in the reported date field of the DIFM detail. There may be times when you can't wait for automatic reporting. You can force report by using advice code D. This advice code is assigned to the DIFM detail by a DFM input.

When the EAIM responds with an XE8, this tells you what action to take with the end item. If the XE8 contains an advice code of 1, you must ensure that the end item is immediately turned in for evacuation to the appropriate technical repair center. Maintenance action code 4 is used for the transactions.

By using the R26 and D19 to their utmost capability, you can ensure a valid and prompt repair cycle program.

Exercises (428):

1. What provides the necessary management products to assist in the monitoring of AWP end items?

2. What provides supply and maintenance managers with the statistics for determining the status of the AWP program?

3. What action might you take to return an end item to a serviceable condition?

4. What provides an automated exchange of AWP data between bases and ALCs?

5. What card is sent to depot for disposition instructions? What card is returned to your base with disposition instructions?

4-7. Time Change Requirements

Some items require changing after so many hours of use (i.e., jet engines, tubing, and cables, etc.). There are two types of time change requirements. These are calendar and operational hours. A time change/technical order compliance (TOC) kit monitor is established in the repair cycle support section to accomplish all required time change actions.

429. Cite the types and procedures for monitoring time change requirements.

Calendar Items. Calendar time change items are listed in inspection and scheduled maintenance requirement —6 series technical orders, designated by weapon system or equipment; for example, TO 1A–7D–6, TO 21M–AGM69A–6, or TO 11K1–4–6. These —6 series technical orders are used as a basis for determining items to be reported in compliance with AFM 67–1, Volume 1, Part 1.

Items listed in inspection and age control of USAF equipment, TO 00–20K, are excluded from control under this manual. Flying hour and equipment hour time change

AWP ADVICE CODES

AWP advice codes are stored on the DIFM Detail and indicate AWP disposition actions or requests for AWP disposition.

Advice Code	Description
1	Evacuate the end item.
2	Hold. Repair part is being supplied within 30 (CONUS) or 45 (overseas) days.
3	Hold. Requisition stock replenishment.
4	Hold. Message to follow.
5	Hold. Submit new report if problem is not resolved in 60 days.
6	Hold. Submit new report if end item remains AWP beyond 90 days.
D	Force disposition request. Is assigned by the AWP monitor or receipt of invalid AWP advice code from the IM, to force submission of an AWP Disposition Request Report (DIC XE7). This code will be changed to R when the XE7 card is submitted.
R	AWP Disposition Request Report (XE7) has been submitted to the end item item manager.

Figure 4–6.

items are also excluded from control, as indicated by this manual. All items to be reported are listed in TO 00–20–9. The provisions of this manual apply to AFLC item manager, Air Logistics Center base support organizations, Air Force bases, and requisitioning agencies. Security assistance (SA) program countries that requisition items designated in TO 00–20–9 from Air Force resources must comply with Air Force base reporting requirements.

Projections of selected calendar time change item replacement requirements are prepared quarterly as of 1 March, 1 June, 1 September, and 1 December by maintenance documentation personnel. AFTO Forms 223, Time Change Requirements Forecast, are reviewed by maintenance supply liaison (MSL) personnel before forwarding within 7 working days after the "as of" date, to the repair cycle support section for supply-type items and to Munitions Supply (AFK) for munitions-type items (FSG 13).

Operational Items. Other time change requirements, such as those based on operational hours rather than the definite calendar life of the item, are subject to the same demand patterns and requirements computation as are other items related to programmed flying hours or comparable criteria. Bases normally support these requirements from computed stock levels. Adjusted stock levels may be negotiated with the item manager concerned for new items or other exceptions to this rule. However, the predictable nature of these requirements permits additional base-level management to ensure timely support of maintenance demands.

Base Procedures. On the first workday following the first day of each month, Maintenance Materiel Control/MSL prepares an AF Form 2005 for each item to be changed during the following month (i.e., December requests are prepared in November). The AF Form 2005 is prepared in three copies and sent to the repair cycle support section. The date and serial number fields of the document number are left blank. A UJC of AU, BU, and CU, and a delivery destination code of TCG is entered on the issue request. The Julian date that the time change is needed is entered in block C of the AF Form 2005.

The repair cycle support section files all copies of the AF Form 2005 in a suspense file until the request meets the following criteria expressed in days before the required data.

FAD	*CONUS*	*OS*
I	11	16
II	11	16
III	11	16
IV	15	20
V	15	20

At that time, Materiel Control is contacted to verify that the scheduled date is firm. If the scheduled date is firm, an activity code R document number is assigned to the AF Form 2005. Copies 1 and 2 are sent to the demand processing unit; copy 3 is retained by the repair cycle support section as a suspense document.

You should remember from material previously covered in this volume that issue requests are prepared and processed through the demand processing unit. Items are delivered to the maintenance tail number bin (TNB) holding area where the issue (ISU) or due-out release (DOR) document(s) are signed and the property is placed in the appropriate TNB. The time change monitor uses the daily document register (D04) to purge the AF Form 2005 suspense file.

Time change items are binned in a special storage area by aircraft or equipment serial number awaiting entry of the end item into Maintenance. The suspended AF Form 2005 (copy three) is annotated to reflect storage and is returned to Materiel Control.

Materiel Control coordinates with the repair cycle support section on a daily basis to determine what action is to be taken on overdue time change items. All required items that aren't in the holding areas are researched for status. The status is annotated on the suspended AF Form 2005 that is kept by the repair cycle support section. Items that aren't available when requested by Materiel Control require an input to upgrade the requirement to the appropriate priority condition.

MICAP Requirements for Time Change Items. As you read in Chapter 1, when a MICAP requirement occurs, total base assets are researched. This research includes items being held for time change. If an item is found in the time change storage area to satisfy a MICAP requirement, the repair cycle support section processes a turn-in (TIN) with action taken code B. If the MICAP requirement is already loaded as a due-out, the MICAP due-out document number is entered on the TIN input to force a due-out release. If there isn't a MICAP due-out, a new issue is processed. But first a turn-in, with a TEX code to prevent automatic due-out release, is processed to return the time change item to supply accountability. The resulting issue or due-out release document is used to effect the issue or release from the time change holding area.

Exercises (429):

1. What are the types of time change items?

2. When are time change issue requests prepared?

3. How many copies are time change issue requests prepared in and where are these requests sent?

4. What UJCs are used on time change requests?

5. What does the time change monitor use to purge the AF Form 2005 suspense file?

6. If a MICAP due-out exists and property exists in the time change holding area, what do you process to release the item?

4-8. TCTO Requirements

The repair cycle support section is responsible for the time compliance technical order (TCTO) kit function. TCTO kits are used to modify end items while they're out in the field. By sending modification kits to the bases for field installation, time and money can be saved.

430. Cite the procedures for ordering, controlling, and reconciling TCTO kits.

Management. The term "kit" as we use it, applies to the assembly of all parts and materiel required to complete a technical order modification on a single aircraft/missile, end item of equipment, or spare part/component required in support of maintenance activities. The AFLC system manager/item manager (SM/IM) has the primary responsibility for the provisioning, procurement, assembly, storage, distribution, and control of TCTO kits.

All TCTO kits are requisitioned by the repair cycle support section and subsequently distributed by the applicable ALC or contractor using normal MILSTRIP procedures. TCTO kits that are assembled at AFLC ALCs and contractor facilities contain all parts needed to perform the modification except for common-use tools and equipment. Any deviation to this policy requires a waiver agreed to by the using command Deputy Chief of Staff Logistics (LG) prior to the ALC or contractor releasing the TCTO kit. Items omitted from the kit, based on approved waivers, are obtained from existing organization resources or purchased from Base Supply as needed. When kits are received with parts or materiel shortages without a prior waiver agreement, the TCTO monitor notifies the issuing ALC, IM/SM, by telephone, message, or letter. Telephone notification must be followed up with written communication. Bases are not expected to requisition these shortages nor to cite funds to cover the shortages.

Requirements Identification. Requirements for TCTO kits and/or parts needed to assemble a kit are submitted to the repair cycle support section on an AF Form 2001, Notification of TCTO Kit Requirements, by the requesting maintenance activity.

Incoming technical publications are reviewed by the maintenance activity to determine if TCTO kits are needed

for equipment as spare or component parts. When the TCTO applies to spare or component parts, the maintenance activity coordinates with the inspection section to determine kit requirements for items in stock. The inspection section reviews the stock status of items to be modified to determine the quantity onhand in base stocks, including those in mobile spares kits. Upon determining the total number of kits needed to modify base supply stocks, the inspection section notifies the appropriate maintenance activity of the number.

Once the total kit requirement has been determined, the maintenance activity prepares an AF Form 2001 by completing parts I, II, and III. The organization code and shop code of the maintenance shop responsible for accomplishing the modification is entered in part I of the form. The UJC (AU, BU, or CU), required delivery date (RDD), and any other required remarks is entered by Maintenance in part III.

The AF Form 2001 is prepared in three copies. The original and one copy is forwarded to the repair cycle support section. The maintenance activity keeps one copy.

Requisitioning Procedures. Upon receipt of the AF Form 2001, the repair cycle support section requests that the research unit load an item record. TCTO kit stock numbers are identified by a K in the fifth position. The nomenclature contains the letters TO in the first two positions, blank in the third, and the technical order in the remaining 16 positions of the nomenclature field (i.e., TO 1B-52F-634-A). The ERRCD is always XD2. Centrally procured depot/contractor assembled TCTO kits are assigned the appropriate depot routing identifier codes (FPZ, FHZ, etc.). Base-assembled kits are assigned a routing identifier code of JBD (local manufacture). The unit cost of TCTO kits that are authorized for base assembly is equal to the total cost of all parts in the kit.

When a TCTO kit applies to a major item of equipment, aircraft, or missile, and is to be requisitioned from the depot, the repair cycle support section prepares an AF Form 2005 (TRIC ISU). You can either prepare an AF Form 2005 for each kit or you can consolidate all of the requirements into one AF Form 2005. For example, if you need five TCTO kits, you can fill out five AF Forms 2005 for one each or you can fill out one AF Form 2005 for five each.

All issue requests for TCTO kits identified by a K in the fifth position of the stock number are assigned demand code I (initial issue). Any other demand codes are changed to I by Program Control. The standard reporting designator (SRD) is entered in the mark for field. Shop code TO is used when ordering TCTO kits.

The issue request may be input by either the demand processing unit or the TCTO kit monitor, as determined by local management, to establish a due-out and requisition for each TCTO kit. The TCTO kit due-out documents that are produced by the SBSS ADS are returned to the repair cycle support section. The due-out document is attached to the second copy of the AF Form 2001 and is returned to the requesting maintenance activity.

If the TCTO kit applies to the modification of parts or components (base stocks, mobile parts, or installed items), you prepare an issue request for the total number of kits required to complete the modifications (one issue request for the entire quantity). If the kit is to be requisitioned from depot, leave the TEX code field blank on UJC BU and CU requests. The SBSS ADS automatically produces a requisition. UCJ AU requests are processed as fill or kill if the TEX code is blank. If the kit is to be base assembled, you enter a TEX code 7 in cc 51 and prepare an off-line requisition (TRIC SPR).

The TCTO kit monitor enters the date the kit was issued (forced due-out released) against the applicable tail or serial numbers in part II of the AF Form 2001. If a consolidated issue request was used, you enter the quantity that was released. The document number that was assigned to the issue request is also entered in part II. When the kit is received or assembled, you indicate the quantity that is available for issue.

In part IV of the AF Form 2001, you check the applicable source block and indicate the routing identifier code to be entered on the item record. Part V is used to record data that pertains to components or spares and materiels needed to assemble or complete the kit.

Receipt and Release of TCTO Kits. TCTO kits are received by the receiving section; however, the kits are not automatically released to Maintenance. Instead, a notice to bin is provided. All TCTO kits are sent to the repair cycle support section.

In addition to the notice to bin, the SBSS produces a TCTO kit asset availability notice (I029 management notice) on the repair cycle support section terminal. This notice is produced when a TCTO kit asset is gained either by receipt, turn-in, or inventory adjustment. The I029 notice reflects the total on-hand balance and each existing due-out detail record. All copies of this notice are sent to the TCTO kit monitor. One copy of the notice is placed in the TCTO kit jacket file. The remaining copies are sent to Materiel Control. The copy that is placed in the jacket file replaces any previous notices. The removed notices are destroyed.

As base-assembled TCTO kits are completed, the TCTO kit monitor prepares a receiving document (TRIC REC) on a DD Form 1348-1. You use routing identifier JBD and the due-in requisition document number. The receiving document is signed by the repair cycle support section to indicate that the number of kits reflected in the quantity field are complete. The receiving section processes the receipt and forwards the REC document to Document Control.

When TCTO kits are needed, Materiel Control advises the TCTO kit monitor who forces a due-out release (DOR). Materiel Control furnishes the TO and due-out document number to be released. The TCTO kit monitor verifies the completeness of the requested kit prior to processing a DOR. If a kit is incomplete, Maintenance has the option of accepting the kit. The date of release of each TCTO kit is annotated on the AF Form 2001 by the TCTO kit monitor.

TCTO Jacket File. Upon receipt of the AF Form 2001, the TCTO kit monitor establishes and maintains a jacket file for all documents pertaining to the TO. This file is kept in TO sequence and consists of the following.

- AF Form 2001.

- A copy of receipt documents.
- Latest copy of I029 management notice.
- Notification of kit transfers.
- The TO.

The TCTO jacket file is placed in the completed file when all balances are reduced to zero and no requirements exist.

Control of TCTO kits. The repair cycle support section stores TCTO kits as end items. They ensure that controls are set up to prevent the loss or unauthorized use of kits or components.

Both Maintenance and Supply must ensure the following:

a. Kits are installed in the designated end item of equipment/aircraft or missile. If the kits are installed in a different tail/serial number, the maintenance activity contacts the repair cycle support section who takes action to change the mark for.

b. Maintenance Materiel Control advises the repair cycle support section of impending aircraft/end item transfers. This notification should be provided sufficiently in advance of the transfer to allow shipment of applicable TCTO kits with the aircraft or end item. Materiel Control provides identification data to include date of transfer, specific TCTO number to be transferred, destination base, type, and tail or identification number. Upon receipt of aircraft and item transfer notices, the repair cycle support section determines the availability of the kits designated for transfer and takes appropriate action.

Reconciliation. At least once each calendar month, all TCTO kit assets and requirements are reconciled with Materiel Control. The purpose of the reconciliation is to inform maintenance of kit availability, shortages, excesses, due-outs, and due-ins. Materiel Control advises the repair cycle support section of all excesses, any changes required in existing due-outs, and any additional requirements not reflected in the reconciliation listing.

Exercises (430):

1. Who has the primary responsibility for the provisioning, procurement, assembly, storage, distribution, and control of TCTO kits?

2. What action do you take when a kit is received with shortages and there was no prior waiver agreement?

3. What form is used to identify the number of TCTO kits needed by Maintenance?

4. What activity does Maintenance coordinate with to determine total base requirements for TCTO kits?

5. How do you identify TCTO kit stock numbers?

6. What are the two methods of requisitioning TCTO kits from depot?

7. Who enters the date that the kit issued in Part II of the AF Form 2001?

8. What notices are produced upon receipt processing of a TCTO kit?

9. When is a TCTO jacket file established?

10. How and where are TCTO kits stored?

11. How often are TCTO kits reconciled with Materiel Control?

4-9. Turnaround Actions

There are times when a situation requires that an unserviceable item be repaired and reinstalled on an end item without contacting Base Supply. Items processed in this manner are known as maintenance *turnarounds*. The repair cycle support section has the responsibility to ensure that these maintenance actions are reported timely and accurately.

431. State the purpose and procedures for processing maintenance turnaround actions.

Purpose. When a repair cycle item is not physically processed through Supply, and a confirmed demand is not placed on Supply, and the item is repaired and reinstalled on the aircraft/end item, Maintenance furnishes sufficient data to the repair cycle support section to process documentation for recording demand and repair cycle data on the item. The repair cycle support section uses the furnished data to prepare and process a maintenance turnaround record update (TRIC TRN), to update demand data on the item record, and repair cycle data on the repair cycle record.

The importance of processing TRN data cannot be overemphasized. The processing of a TRN provides the same demand data generated as if a serviceable asset had

been issued from Supply and Maintenance had repaired and turned in the assembly that failed. Failure to process TRN data in a correct and timely manner results in reduced base stock levels and incomplete reports from which buy, repair, and distribution decisions are made by AFLC. Only close coordination between Maintenance and Supply ensures the generation of the stock levels required to support the base repair cycle.

Procedures. The operations support officer or NCOIC (noncommissioned officer in charge) appoints a primary and alternate TRN monitor. The monitor is assigned to the repair cycle support section and acts as the single point for processing AFTO Form 350, Reparable Processing Tag, TRN data. The TRN monitor has the following duties.

a. Ensures that each maintenance Production Control supported is notified of the name, duty location, phone number, and mailing address to be used when processing TRN data or for resolving any related problems.

b. Assigns a production control identfication (ID) number to each maintenance production control supported. The ID number may be any two-digit number between 01 and 99 and is used as the shop code of the TRN document number.

c. Receives all AFTO Forms 350, Part II, which require TRN processing from each maintenance Production Control. On-base maintenance activities deliver the AFTO Forms 350. Off-base activities utilize the U.S. Postal Service unless a unit representative visits the main base on a scheduled basis.

d. Coordinates all required research by Maintenance (part number) and Supply (stock number) to ensure that all part numbers are converted to a valid stock number. Stock number loads (FIL) are processed, if required. Local quick reference lists may be developed to allow for identification of high-demand items by the TRN monitor.

e. Prepares TRN inputs for processing (fig. 4-7). TRN inputs may be processed by terminal if an operator and terminal time are available. The AFTO Form 350 tags are kept in tag number sequence by shop code (Production Control ID number) until processing is verified through review of the daily document register (D04), at which time the tag may be disposed of.

f. Reviews each daily document register to ensure that each TRN has been processed. The TRN monitor keeps copy two and distributes copy three to the applicable Production Control. Copy four may be used as locally determined.

If a confirmed demand has been placed on Supply which resulted in a due-out and the item is repaired or replacement is no longer required, a due-out cancellation (TRIC DOC) must be prepared to cancel the due-out/DIFM details and to update demand/repair cycle data. The DOC must include the action taken code and number of repair cycle days. When a due-out cancellation is prepared, the repair cycle support section ensures that the applicable document in the DIFM suspense file is purged. This copy is not destroyed until cancellation has been confirmed by deletion from the DIFM listing (R26).

Exercises (431):

1. What data is updated by processing a maintenance turnaround record update?

2. What is the result of failing to process TRN data correctly and timely?

3. What must the TRN monitor furnish to each maintenance Production Control supported?

4. If a due-out is established and the item is repaired, what action do you take? What data is included on this input?

4-10. Materiel Deficiency Report (MDR) Exhibits

As you read earlier, the repair cycle support section initiates turn-in action on DIFM items. It also monitors turn-in action of MDR exhibits. These items are unsatisfactory due to manufacturing defects.

432. Cite specific requirements concerning the processing of MDR exhibits.

Turn-in. The repair cycle support section processes MDR turn-ins for ERRCD XD/XF/XB items. Items that illustrate unsatisfactory conditions are processed as unserviceable turn-ins with an action taken code C, and supply condition code F. This type of turn-in establishes an unserviceable detail with a supply condition code of J under program control. If the MDR item is assigned budget code 1 or 9, the turn-in program automatically assigns credit code Y (yes, credit is given) without prior approval from the funds manager. This can be overridden by using credit code N (no, credit is not given) on the TIN input. This override option must be signed by the funds manager.

Action taken code C turn-ins update the appropriate details (i.e., DIFM, In-Use). A management notice I012 (stock awaiting disposition) is printed on the input terminal reflecting the unserviceable detail document number. A copy of the I012 management notice is attached to the property for subsequent identification purposes. MDR exhibits are centrally stored within Base Supply except when facilities cannot accommodate oversized items.

After the turn-in has been processed, a DFM input is processed to load the warehouse location and the followup date of the MDR exhibit. The followup date is 20 days from the MDR message date.

Disposition. Upon receipt of disposition instructions, a shipment (SHP), transfer (TRM), or issue (MSI) input is processed, using the document number of the unserviceable

GENERAL PURPOSE CREATION — TO: ☐ KEYPUNCH ☐ REMOTE — FROM:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
T	R	N	F	L			4	9	3	5	Ø	Ø	Ø	Ø	6	5	2	8	Ø

REMARKS

21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
A	H	E	A	Ø	Ø	Ø	Ø	1	X	7	4	4	1	3	Ø	Ø	8	3	2
41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
2	5	4	F											Ø	1				
61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
							G	N	C	7	4								

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Figure 4–7. TRN input.

detail created during turn-in processing. This document number is reflected on line four of the turn-in management notice. Inputs to ship, transfer, or issue MDR exhibits are processed as follows:

a. If the asset is to be shipped to another activity, a SHP input is prepared. The output shipping document (DD Form 1348–1) is routed to the terminal assigned to the warehouse where the item is physically located. If a warehouse location is omitted, the DD Form 1348–1 is sent to the RPS/main printer and forwarded to the responsible agency via the distribution unit.

b. If the item is to be transferred to defense reutilization marketing office (DRMO), a TRM input is prepared and processed.

c. If the item is to be issued to Maintenance for local repair or modification, an unserviceable issue request (MSI) is prepared and processed to transfer the item to maintenance.

It is important that items received from the source of supply in unserviceable condition be processed as an MDR exhibit. This way, you can ensure that the Air Force is getting a serviceable product for their money.

Exercises (432):

1. What activity normally provides storage facilities for MDR exhibits?
2. What details are updated as the result of using action taken code C in cc 51 of the unserviceable turn-in request?
3. Why should you process a DFM input after the turn-in of a MDR exhibit?
4. What input is used to issue the MDR exhibit back to Maintenance for local repair of modification?

4-11. Critical Item Management

The Air Force, like many other industries, has certain items in short supply. These are called critical items and must be closely monitored at all times. Critical items are monitored by the critical item monitor in the repair cycle support section.

433. Cite the procedures for managing critical items.

Purpose. The critical item management system is designed to identify and apply special management controls to selected items. Items are selected for cost support considerations. The exact number of items in the system

varies, depending upon their changes in support status as determined by the IM. This system:

a. Reduces mission capability (MICAP) and cannibalizations.

b. Makes critical items available to users when they are needed.

c. Refines and improves the issue, control, and repair of critical items at base level.

d. Provides an asset report to the AFLC IM from each base for each critical item.

e. Provides single point issuances of RDOs (redistribution orders) to ensure equitable distribution of each critical item at each base until the total authorized requisitioning objective can be filled.

Selection. AFLC item managers select items that are known to be in critical support status Air Force wide. These items are referred to the ALC Directorate of Materiel Management Critical Item Review Committee or office for review and approval. All items (stock numbers) approved by this committee or office are transmitted throughout the Air Force on critical item notification (DZE) cards.

AFLC item managers select "black box" items of modular design commonly called *line replaceable units* (LRU) and associated *shop replaceable units* (SRU) for critical item management based on cost considerations.

Bases may recommend items for inclusion in this system. Senior materiel officers at bases recommend items to be put into the critical item system, based upon available information from maintenance and supply records. Items are recommended and submitted to the major command headquarters according to the instructions set forth by major command directives.

Management. Critical item monitors are provided asset visibility by the problem item listing (R29). The frequency of this list is determined by MAJCOM. A copy of the R29 is sent to Materiel Control, Repair Cycle Support, and Inspection.

The critical item monitor must ensure the expeditious processing of critical items through the repair cycle or NRTS/condemnation evaluation process. When critical items are issued, the term CRITICAL is printed on line 7 of the issue document. Critical item monitors must ensure that supply and maintenance personnel involved in the processing of reparables are aware of the urgency in getting critical items back into service.

The R26 identifies all critical items in DIFM status with the appropriate phrase (ACRT for AFLC Critical, BMGT for base management, RCRT for requirement critical) printed to the extreme right side of the stock number entry of the R26. The Q04, repair cycle data list, identifies critical items with the phrase CRITEM printed to the extreme right side of the listing. Both of these listings are extremely important in managing critical items.

The critical item monitor uses the D19 for monitoring critical items in AWP status. Critical items are identified by a maintenance priority code (MPC) of 3 or L. If the estimated delivery date (EDD) exceeds 30 days CONUS or 45 days overseas, asterisks (*) are printed in positions 82–85 of the listing.

Issues. All critical items are assigned an Air Force Recoverable Assembly Management System (AFRAMS)/WRM report code of 5, 7, E, or G when the DZE decks are processed. The S1100/60 is the basic instrument for monitoring issue requests for critical items. Prior approval by the critical item manager isn't necessary.

All critical item issue requests are processed as fill or kill. In the event of a kill, demand processing unit personnel advise Materiel Control that the item is critical and to speed up delivery of the item to the appropriate Production Control for repair. If the item cannot be repaired, validation and confirmation of the demand is processed as discussed in Chapter 1.

All issue documents are printed or stamped "Critical Item," based on the supply system used. Supply point and demand processing unit personnel are responsible for marking other documents. Maintenance production control personnel stamp or annotate all applicable maintenance forms "Critical Item." Reparable processing center personnel stamp or annotate all paperwork, cards, and tags as "Critical Item," based on the system used at each activity. This includes shipping documents, DIFM cards, and identification tags attached to the property.

The COS ensures that all personnel on night duty know these procedures and that they have sufficient knowledge of maintenance procedures to make decisions on requisitioning, issuing, and transferring critical items. To control critical items after duty hours, it is recommended that DPU keep a log that includes the NSN, document number, end item serial number, verifier, and action taken on the issue document for all requests that require exceptional processing.

Critical Item (DZE) Notification Decks. Monthly, each ALC critical item monitor provides SNUD a complete critical item deck. From this deck, SNUD sends to registered users all applicable items that have been added to or deleted from the critical item system and all applicable active critical items.

This data transmitted by SNUD, via DZE cards, is processed in the S1100/60 without any external review. When this data is processed by the SBSS Data Base, F124 management notices are output for item records with IEX codes.

Inventory recount cards (TRIC IRC) are output for new items added to the critical item management system when the date of last inventory (DOLI) is greater than 30 days. For each IRC produced, a 1GP notice, containing enough data to complete a special inventory, is also produced. The notices and cards are sent to the inventory section that then conducts a special inventory. One copy of the notice is sent to the critical item monitor.

Base/Command Intensive Management Items. These items are jointly identified by Supply and Maintenance as needing intensified surveillance to prevent an adverse supply support posture. These items are identified by IEX code 0. Items that are identified as marginal analysis (report codes 1 and 2), EOQ critical (report codes 4 and 5), or nonmarginal analysis critical recoverable (report code 7) are not designated as base/command intensive management items.

Assignment of IEX 0 to the item record results in the following:

- Assignment of MPC C on the item record.
- Identification of DIFM details on the R26 as BASE MGT.
- Printing BASE/COMMAND INTENSIVE MANAGEMENT ITEM on all issue documents.
- Inclusion on the R29, when the critical item select option is used.

Exercises (433):

1. What method is used to alert Air Force bases as to what items are included in the critical item management system?

2. What provides asset visibility to the critical item monitor?

3. What product identifies all critical items that are in DIFM status?

4. What two products are essential when managing critical items?

5. What product is used to monitor critical items in AWP status?

6. What is assigned to the item record of critical items when DZE decks are processed?

7. How are critical item issue requests processed?

8. How often does the ALC critical item monitor provide a complete critical item deck to SNUD?

9. Who identifies base/command intensive management items, and how are they identified on the item record?

CHAPTER 5

Bench Stock Support

IN CHAPTER 4, you learned about the repair cycle support section and its operations. In this chapter, you learn how heavily the success of the repair cycle operation depends on bench stock support. A simple item that costs less than 25 cents may delay the repair of a DIFM item just as easily as an item costing much more. Bench stock items are usually not very expensive, but this doesn't make them any less important.

5-1. Policy and Concept

A bench stock is a group of items located in the work area to ensure the constant availability of bits and pieces needed to support the work schedule. So a portion of base stock is kept in the work area of a maintenance activity rather than in the base supply warehouse. The difference between a bench stock and a supply point is the ERRCD and asset accountability. Supply point assets belong to Base Supply and bench stock assets belong to the using activity.

434. State the advantages and disadvantages of the bench stock concept.

Advantages. When you think of an advantage, you think of something that is going to benefit you. That is what the bench stock program does for its customers. Instead of being stocked in a distant warehouse, the items are kept in the working area. This is an obvious advantage to the customers who also have the satisfaction of seeing their materiel under their control. Furthermore, communication and transportation needs are reduced between the user and Supply. This setup benefits both the user and Supply because it saves both of them time and work. Making infrequent bulk issues, instead of frequent individual issues, reduces the workload in Supply. As you can see with this system maintenance support is greatly enhanced.

Disadvantages. In spite of the advantages just stated, you must consider the disadvantages of this system as well. For one, a considerable amount of effort is required to establish and maintain a bench stock. Also, this setup requires that you set aside space for stock in the forward area, and this, in turn, requires capital investment in bins and security. Finally, under the stock fund concept, funded items are paid for by the organization when they are issued from Base Supply. Since bench stocks are anticipations of need rather than actual needs, this system calls for organizations always having to pay for items that they may or may not use.

Exercises (434):

1. Identify the following as an advantage or disadvantage:

   a. Locating a bench stock in the forward area of the maintenance complex may require a great deal of money and security, but it is the most convenient place to locate it.

   b. Even if the customer is able to control the items used by having them in the work area, Base Supply has to relocate the property from the warehouse to the maintenance area.

   c. Bench stock reduces the workload and saves time and manpower.

5-2. Bench Stock Establishment

Establishing a bench stock is a coordinated effort of Maintenance and Supply. It is one of the bench stock support section's most important functions.

435. State the criteria and procedures for establishing a bench stock.

Criteria. Items placed on bench stock must be in accordance with established criteria and deviations. The following are the criteria.

a. The item record ERRCD must be XB3.

b. The item record must not be coded as TCTO (numeric parts preference code (NPPC) 4); unacceptable for Air Force use (NPPC 9); Air Force Recoverable Assembly Management System (AFRAMS)/WRM codes 5, 6, 7, E, F, or G; classified; or sensitive.

c. There must have been three demands from the activity that have resulted in issue or due-out release action within

90 days to justify a recommendation to add an item when processing the bench stock recommended additions program (M04). The difference between the date of first demand (DOFD) and date of last demand (DOLD) must be greater than 30 days.

d. The item record requistioning objective must be greater than zero. If the demand level is zero, the M04 will not recommend an add unless there is a firm minimum level on the item record.

Special rules apply to items assigned a controlled item code. Controlled items codes I, U, Y, Z, and * (asterisk) items are authorized on bench stock. Controlled item code J items, which fall in the categories defined by controlled item codes I, Y, and Z, are also authorized on bench stock. None of these categories require issue exception codes.

Photographic items, controlled item codes J, R, X, or *, are authorized on bench stocks when approved by the unit commander and the base audiovisual manager. The shop supervisor or bench stock monitor initiates a letter to the unit commander requesting approval to add photographic items to their bench stock. If approved, the unit commander indorses the letter to the base audiovisual manager. If approved, the letter is indorsed to the bench stock support section. Approval letters are filed in the bench stock support section and retained in an active file as long as the item is on bench stock. A copy of the approval letter is returned to the unit commander.

Other controlled item codes are not authorized on bench stock unless approved by HQ USAF/LEYSP. These items are identified by IEX code N on the item record. When IEX code N is assigned, the other asset flag for bench stock items is not assigned with the FCD input. The bench stock flag is assigned under program control when the master bench stock detail is loaded.

Deviations. Just as there are criteria to establish a bench stock, there must also be exceptions to the criteria. We call these exceptions *deviations*. The following are deviations to the criteria for establishing a bench stock.

a. While the standard method for adding, changing, or deleting items from bench stocks is through the semiannual bench stock review or processing the M04, an item can be added or deleted any time it meets the criteria. Organizations can add items via telephone to bench stock at any time, regardless of consumption.

b. There are other methods of establishing items on a bench stock when they are not justified by consumption criteria. When any of these methods are used, a minimum reserve authorization (MRA) quantity must be established and justified. Four of these methods are as follows:

(1) When the end item being supported is a prime mission aircraft or missile system. The deputy commander for maintenance (DCM) feels the organizations cannot wait for items to be delivered from supply warehouses. The item(s) requested is included in the AFLC ISSL, Initial Spares Support List, for the system.

(2) When the organization supported is off base, or in a truly remote part of the base, then a bench stock minimum reserve authorization (MRA) may be approved by the COS.

(3) When specifically approved by the chief of resource requirements for base civil engineer (BCE) cost centers, the maintenance control supervisor for maintenance activities, organization commanders, responsibility center (RC) manager, or organization's funds manager.

(4) When the unit of issue is not compatible with the unit of use (such as nuts, bolts, and screws that come in boxes or packages), then a minimum reserve authorization (MRA) or maximum authorized quantity (MAQ) may be approved. The standard pack or quantity per unit pack may be authorized on bench stock, regardless of the number of days of expected usage.

c. Items that are required on bench stock, but must have the quantity restricted because of storage or other problems, may have a MAQ assigned.

d. Gases and random length items, such as bar stock, sheet metal, plastic, fabric, lumber, and similar types of items, are normally not included in bench stocks. They may be included in bench stock if justified by consumption and if the authorized quantity is the unit pack. Selected random length and similar items agreed upon by the bench stock support section and the shop chief may be requested on a post-post basis and stored in the shop. To prevent supply stocks from becoming excess and inactive, they should not exceed 90 days usage or unit of issue/pack, whichever is greater.

e. Administrative and janitorial supplies are normally issued through the self-service (BSS) system. The BSS concept ensures the full use of substitutes to avoid overloading the bench stock support section. If the BSS system isn't used, these items can be included on bench stock and are provided the same review, binning, and delivery service as any other bench stock item.

f. Certain consumable handtools may be placed on maintenance bench stocks. These are limited to tools that are consumed in use and are unclassified (i.e., saw blades, soft tip screwdrivers, bits, files, and file cleaners).

The standard number of days used to compute the authorized quantity for bench stock is 30 days. At the option of the base or command, 30, 45, or 60 stockage days can be used to determine the bench stock authorized quantity to increase the support needed by a particular organization. Bench stock stockage days are loaded to the OCCR.

Unless specifically included in a joint tenancy agreement or some other specific directive, the bench stock support section cannot provide review, binning, and delivery service to offbase organizations. When there are access restrictions to the bench stock location, the supporting activity may be assigned the servicing activities (i.e., weekly walk-through, inventory, binning, and placard maintenance).

Minimum Reserve Authorization (MRA)/Maximum Authorized Quantity (MAQ). Bench stock levels for items justified by normal consumption patterns (not subject to one of the deviations) are computed by the semiannual bench stock review.

Items authorized a deviation must have either a bench stock minimum reserve authorization (MRA) or maximum authorized quantity (MAQ) requirements flag entered in the master bench stock detail. Shown here are these indicators and their meanings.

Code	*Meaning*
1	Bench stock MRA based on a 30-day requirement
2	Bench stock MAQ based on a 30-day requirement
3	Bench stock MRA based on a 45-day requirement
4	Bench stock MAQ based on a 45-day requirement
A	Bench stock MRA based on a 60-day requirement
B	Bench stock MAQ based on a 60-day requirement
C	Authorization based on consumption for 60 days with no bench stock minimum reserve
D	Quantity unit pack to be considered when computing recommended level
BLANK	Authorization based on consumption for 30 days with no bench stock minimum reserve

MRAs and MAQs for bench stock have no relationship to adjusted stock levels. Such minimum or maximum quantities do not imply that a minimum or maximum adjusted stock level is to be established. The requirement for adjusted stock levels related to bench stock items are established on the merits of each case. The COS may use excess exception codes (EEC) to protect a temporary large quantity of bench stock items from disposition.

When maximum authorized quantities are established (flag 2 or B), care must be taken to ensure that the authorized detail quantity does not exceed the maximum authorized quantity.

Responsibilities. The initial establishment of a bench stock and its location is coordinated between the supported activity and the materiel storage and distribution officer. The following are responsibilities of the bench stock support section.

a. Placement of a notice at each bench stock location that explains each entry on the bench stock bin label.

b. Installation, maintenance, and updating of a placard that is placed in a noticeable location in each bench stock area. The placard, as a minimum, must contain the following five headings:

(1) Organization and shop code.
(2) Date of last inventory (DOLI).
(3) Date of next inventory.
(4) Date of last walk-through.
(5) Telephone number of the office to contact to resolve bench stock problems.

c. Plus those responsibilities discussed in Volume 1. The supported activity is responsible for the following.

a. The preparation and care of any shadow boards used.

b. Providing adequate storage facilities for the bench stock.

c. Proper care and safeguarding of bench stock items in accordance with AFR 20–14. Local control is established to control sensitive items.

d. Flagging bench stock items with a red indicator when the bin contains approximately 50 percent or less of the authorized quantity.

e. Installation, maintenance, and updating of placards at off-base bench stock locations.

f. Establishing controls to ensure that shelf-life assets are used before the expiration date.

Organizations are authorized to keep a specific bench stock quantity on an item even though their consumption is declining. This action may create support problems and may require the establishment of an adjusted stock level.

Establishment. Master bench stock details are loaded, using TRIC 2BS, for each stock number added to bench stock. These details must be loaded in the SBSS Data Base prior to processing a request for an issue. TRIC 2BS is also used to change and delete master bench stock details.

Each item approved for bench stock is assigned a 14-digit document number by the bench stock support section. This number identifies the item as being on an organization's bench stock and serves as the bin location, as well as the document number, for all supply transactions. Each time on bench stock retains this number until it is deleted, even though the stock number may be changed. Documents consist of the following elements of data in the order listed.

a. Activity code B. This code is assigned to all bench stock transactions.

b. Organization and shop code.

c. Date of last demand (DOLD). This date is updated by the SBSS ADS when the master bench stock item is first processed for issue and upon subsequent replenishment issue.

d. Item number. An item number beginning with 0001 for each shop code is assigned externally for all items as they are established. When a item is deleted from bench stock, the appropriate organization bench stock listing (S04) is annotated accordingly. When an item is added to an established bench stock, the S04 is checked, and the first sequential item number is used. If the requesting activity recommends an item number because of bin size, etc., that number is used, if practical. If no item numbers are available for reuse, the next unused consecutive number is assigned.

Active bench stock items may be relocated periodically to fill empty bins that result from items being deleted from bench stock. This procedure eliminates wasted space in bench stock and provides for more working space. An input with TRIC 2BS is used to perform these changes to the detail.

Exercises (435):

1. Bench stock assets are identified by what ERRCD?

2. In order for the M04 to recommend that an item be added to bench stock, how many demands must have occurred within 90 days?

3. Photographic items are identified by what controlled item codes?

4. Who must approve the addition of photographic items to bench stock?

5. What may you decide to load if your bench stock account is located in a truly remote part of the base?

6. What may be added to the master bench stock detail if the unit of issue isn't compatible with the unit of use?

7. When can gases and random length items be added to bench stock?

8. What is the standard number of days to compute the authorized quantity for bench stocks?

9. Who is responsible for flagging bins that contain 50 percent or less of the authorized quantity?

10. What TRIC is used to load, change, or delete master bench stock details?

5-3. Inventory and Replenishment Procedures

When bench stock items are not available for issue, the bench stock support section must take action to ensure that these conditions are only temporary. Allowing bins to become empty defeats the purpose of bench stock. Remember that empty bins may delay the repair of end items.

436. Cite the procedures for replenishing bench stock accounts.

Replenishment Methods. Occasionally, bench stock items have been used up by the users and must be restocked. Two methods of replenishment are used to do this: cycle replenishments and weekly walk-throughs. These methods are normally performed by the bench stock support section.

Weekly walk-through. With the exception of restricted areas, and when authorized bench stocks are serviced by the customer, the bench stock support section conducts a weekly walk-through of all supported bench stocks. Red flags are displayed if the stock is 50 percent or less than the authorized bench stock quantity, even if there is a due-out (DUO) card in the bin. With the exception of bins that contain due-out (DUO)/due-out exists (DOE) cards for the full authorized quantity, all flagged items are replenished.

Cycle replenishment. Bench stocks are replenished once every 30 days, or more often if it is necessary. The bench stock support section advises the shop supervisor, in advance, of the date and appropriate time that the monthly inventory is to be performed. This allows the supervisor to schedule a representative to meet with supply personnel. The bench stock placard should show this date and time.

Just before the scheduled replenishment date, the bench stock support section must physically review each bench stock and do the following.

a. Remove and destroy all DUO/DOE cards in the bench stock bins.

b. Circle the items numbers which require replenishment on AF Form 465, Bench Stock Inventory. Items should be replenished when the quantity on hand is equal to or less than 50 percent of the authorized quantity. The PCAM unit then uses the AF Form 465 to punch issue request cards (1BS). The 1BS cards are quality controlled by bench stock personnel prior to processing.

c. Identify excess items and coordinate with the supported activity for appropriate action. Items are not considered excess until the onhand balance is more than twice the authorization. Excesses are considered for turn-in when the excess creates a storage problem within the bench stock area.

d. Annotate the placard with "Replenishment Action In Process." This tells the customer that either the property or DUO/DOE cards will be delivered within 2 or 3 days. Upon delivery of the property or cards, you erase the notice and update the date of last inventory (DOLI).

Exercises (436):

1. What are the two methods for replenishing bench stock accounts?

2. During a weekly walk-through, what items are replenished?

3. How often is cycle replenishment accomplished?

4. What form is used to record bench stock items needing replenishment?

5. When are bench stock items considered excess?

437. State the procedures for issuing bench stock assets.

Bench Stock Issue Procedures. Once you have found which bench stock items need replenishment from the AF Form 465, you process an 1BS input. Bench stock issue procedures involve the use of bench stock issues (TRIC

BSU), due-outs (TRIC DUO), or due-out exists (TRIC DOE) cards.

Bench stock issue request (1BS). Input of an 1BS can produce either a bench stock issue card (BSU), bench stock issue document (DD Form 1348-1/TRIC ISU), due-out card (DUO), I031 management notice (BENCH STOCK DUE-OUT QTY ABOVE KILLED FOR LACK OF FUNDS), bench stock due-out exists card (DOE), or I023 management notice. A maximum of 11 line items can be requested with one 1BS input.

A DD Form 1348-1 issue document is always produced under the following three conditions:

(1) When the item record contains an issue exception code (IEX) that requires a phrase to be printed.

(2) When the input contains TEX code @ (7-8 punch).

(3) When the issue document requires filing in the document control section. These consist of issues to type S organizations, issues with extended costs over $100, and issues of items with a controlled item code unequal to U. Signatures from organization representatives are required on all issue documents that are filed in the document control section.

Satellite and offbase organizations may use the bench stock print override option that produces a BSU card, with transportation data punched in cc 71-79 in place of the DD Form 1348-1. This option also produces DOE/DUO cards in place of DD Form 1348-1 notices for satellites. The print override flag is loaded to the OCCR by processing a FOR (organization record load/change/delete) input with an X in cc 75. BSU cards are output at the host base for satellite accounts.

Issue (ISU), due-out (DUO), or due-out exists (DOE) documents are produced for offbase organizations. DD Form 1348-1 (issue), and I004 or I023 management notices are output at the satellite terminal for the satellite organization.

The bench stock issue (BSU) cards are interpreted and sorted in system designator and warehouse location sequence and are then forwarded with any offbase issues to the storage and issue section for processing.

Due-outs (DUO) and due-out exists (DOE). Firm due-outs are established for all initial requests that are processed when the property is not available for issue. When the due-out quantity is killed due to lack of funds, an IO31 management notice is produced.

If a due-out to the requesting bench stock exists for a quantity equal to the authorized bench stock quantity, a due-out exists card is produced. If a due-out exists for a quantity less than the authorized quantity, the existing due-out is adjusted to show the authorized quantity. If no due-out exists, a due-out is established for the total authorized quantity. The item record recurring demands field is updated with the quantity issued or the quantity backordered.

Exercises (437):

1. What TRIC is used to replenish bench stock?
2. What can be output as the result of processing a 1BS?
3. Which types of bench stock issue documents are filed in Document Control?
4. What type of due-out is established for all initial requests when the property isn't available for issue?
5. What action occurs when a bench stock due-out exists for less than the authorized quantity?

438. Cite how bench stocks are replenished using LOGMARS equipment.

Replenishment Via LOGMARS. If you remember from Volume 2, LOGMARS was defined as Department of Defense Logistics Marking and Reading Symbols. LOGMARS uses electronic devices and special functional procedures to process data within the SBSS with bar coded symbols in place of punched cards.

Bench stock replenishment action using LOGMARS equipment eliminates the use of punchcards. Replenishment actions are conducted using a portable hand-held terminal (HHT) and attached hand-held bar code reader laser reader (BCRDR) to read bar coded bench stock labels attached to each bench stock bin. The data is recorded in the HHT memory. When the replenishment inventory is completed, the data is transmitted through the terminal to the SBSS Data Base. Program GV742 uses this data to build 1BS inputs that are internally passed to the pseudo reader for processing by the bench stock issue routine program (GV601).

HHT function. The function of an HHT is to provide bench stock personnel the capability to quickly and easily collect data for transfer to the hose S1100/60. The collection of data through an HHT is controlled by a program that has been loaded into a specific area of the HHT memory. This program is written for a particular application, such as bench stock, in interactive reader language (IRL). This program (GVIRLA) is already loaded when the bench stock support section picks up the HHT from the RPS/Main satellite Terminal.

The program controls data entry by displaying prompts on the display screen. These prompts request data in a particular order until the memory is full or the operator collects all of the data.

The BCRDR is operated by pointing it at the bar coded bin label and pulling the trigger. The red laser beam must be centered on the bar code and the laser scanner must be within 8 inches of the bar coded label. A single beep from the HHT indicates that a good read was made and causes the next prompt to appear on the display screen. Multiple

beeps from the HHT mean that the data was read incorrectly. An error message may appear on the display screen. Your first step is to re-read the label using the BCRDR. If the label can't be read because it is torn, dirty, missing, or has the wrong data, then the data must be keyed in via the keyboard. Data is entered from the keyboard by pressing the appropriate keys and then pressing the ENTER key. A single beep or multiple beeps indicate if the data was accepted or rejected.

Replenishment procedures. The bench stock input program (GVIRLA) allows you to perform bench stock replenishment for one or more shops, depending on the number of items entered at each shop. You can continue to collect data until either the memory is full or all shops have been inventoried. The following steps describe the procedures for replenishing a bench stock.

(1) You first have to load a header card for the account being inventoried. The first display when the program begins is:

IBS HEADER REC
ORGSHOP =

(2) You enter the organization and shop code (ORGSHOP) by using the BCRDR to read the ORGSHOP bar code label or by entering it via the keyboard. If incorrect data is entered, you hear multiple warning beeps from the HHT and the display shows:

INVALID ORG SHOP
ORGSHOP =

(3) Then you re-key or re-read the data until it is correct. Correct entry causes the HHT to sound a single beep. The next prompt is:

TEX CODE =

(4) The TEX code must be entered via the keyboard. The acceptable TEX codes are B, 3, 4, 6, or space. If an incorrect TEX code is entered, the display shows:

INVALID TEX CODE
TEX CODE =

(5) The TEX code is re-entered until it is correct. This completes the header card for a shop. You're now ready to start the count and record the item numbers needing replenishment in the HHT. The next prompt is for the item number:

ENTER ITEM NBR
ITEM =

(6) The item number can be read from the bar-coded label attached to the bin using the BCRDR, or it can be entered via the keyboard. If an incorrect value is entered, the display shows:

INVALID ITEM NBR
ITEM =

(7) The item number must be re-read or re-entered until it is correct. The program continues to ask for item numbers until the memory is full or until all items for that shop have been entered.

(8) When all items for a shop have been inventoried and those items needing replenishment have been entered, you enter a dollar sign ($) from the keyboard. This is entered while the display is prompting for another item number. The entry of the dollar sign ends data collection under the ORGSHOP header record and it causes the display to show:

IS - $ - CORRECT
(Y OR N) ??

(9) If N (no) is entered, the program prompts for the next item number. If Y (yes) is entered, the program displays:

ANOTHER ORG-SHOP
(Y or N) ??

Once all of the shops have been inventoried or the HHT memory is full, you return the HHT to the RPS/Main Satellite Terminal. The bench stock support section informs the RPs/Main Satellite Terminal personnel of the current status and content of the HHT. This is to ensure that the correct procedures are used for transferring data from the HHT to the host (S1100/60).

LOGMARS Output. LOGMARS processing eliminates BSU, DUO, and DOE cards. The output images are written to an output data base record file waiting to be transfered from disk to DD Form 1348-1. The DOE and DUO output is sent to the bench stock support section and the BSU output is sent to the warehouse.

Exercises (438):

1. What LOGMARS components are used to conduct bench stock inventories?

2. What IRL program allows you to use LOGMARS for bench stock replenishment?

3. What must be loaded prior to entering item numbers that need replenishment?

4. If you enter incorrect data into the HHT, what happens?

5. What TEX codes can be used when loading the header card?

6. What replaces BSU, DUO, or DOE cards under LOGMARS processing?

439. State the types of out-of-stock conditions and how each is resolved.

Out of Stock. The authorized quantity for an item on bench stock is normally based on its usage/consumption within a 30-day period. The majority of the items needing replenishment are found during cycle replenishment. Sometimes, due to mission changes (i.e., exercises or new end items to support), the activity depletes their bench stock and can't wait until the weekly walk-through or cycle replenishment to restock their bins.

Depending upon the urgency, organizations place a demand on Supply to replace these items if they are needed sooner than the normal bench stock replenishment time. Several procedures must be followed by the organization should these conditions exist.

Routine empty bin report. The organization may telephone a routine empty bin report to the bench stock support section. Bench stock personnel take the necessary action to replenish and bin the entire bench stock authorization during the next processing of bench stock deliveries, provided that a due-out does not already exist for the item. However, if a due-out has already been established, bench stock personnel deliver the applicable due-out exists (DOE) card to the bench stock bin, indicating this fact.

Urgent empty bin requirement. The organization may telephone an urgent empty bin requirement to the bench stock support section. The 1BS card can be processed with a TEX code @ (7–8 punch) and a 12-zone punch in cc 11, which produces a DD Form 1348–1 in place of BSU cards for these requests. Bench stock personnel hand-carry the issue document, DD Form 1348–1, to the storage and issue section where the property is pulled. The property and issue document are then taken to the pickup and delivery section, which delivers the property as soon as possible (ASAP) but not later than 8 hours. Delivery vehicles are not dispatched soley to meet a specified delivery time, but all deliveries are made by the end of the next duty day.

The bench stock support section notifies the requester of item availability by telephone. If there is already a due-out or no items are available for issue, the request is submitted through the demand processing unit (DPU). During other than normal duty hours, organizations place requirements with DPU for the exact quantity they need.

Immediate requirement. Immediate requirements for a bench stock item may be submitted to DPU. DPU inputs the request, using activity code X. Normal issue procedures are followed, including the reinput of the killed quantity after verification by the requesting activity. Immediate requirements should be for the exact quantity needed.

The bench stock program is designed as a routine operation. Numerous or repeated requests for urgent requirements may indicate problem areas (i.e., inadequate authorized quantity). The bench stock support section and the customer must work together to resolve any problems. For infrequent priority requests, using the DPU expedite call-in point is a more effective use of supply personnel versus submitting priority requests to bench stock.

If the bench stock effectiveness for an organization or shop is unfavorable, the bench stock support section may request the due-out status listing (R31) to ensure that satisfactory supply action has been taken for bench stock due-outs. The bench stock support section coordinates with the stock control section to ensure maximum bench stock support.

Exercises (439):

1. What are the types of out-of-stock conditions?

2. Which out-of-stock conditions are submitted to the bench stock support section?

3. Where are immediate requirements submitted?

4. Within what time period must the pickup and delivery section deliver items issued to satisfy urgent empty bin requirements?

5. What product can be used by the bench stock support section and stock control section to ensure maximum bench stock support?

5-4. Bench Stock Review

The bench stock program is one of the most important aspects of supply support. It involves a large expenditure of funds and a substantial volume of transactions. Through the proper assignment of standard reporting designator (SRD) data, demands on bench stock items identify mission requirements.

440. Identify the phases and actions taken during each phase.

Bench Stock Review. The bench stock review is conducted in two separate phases. Phase I (additions) is done monthly, using the bench stock recommended additions program (M04). Phase II (changes,recommended/automatic deletes) is done semiannually, using the bench stock review (S03).

Phase I. Items recommended by the M04 are based upon past issue and due-out release action, so they do not require approval for addition. However, they are reviewed jointly

by a representative of the bench stock support section and the applicable shop supervisor of Materiel Control to see whether any of the items are a result of abnormal circumstances. Items with approved deviations may be added during this phase.

The M04 produces a listing of those items that qualify for addition to an organizational bench stock. These additions are computed from the EOQ consumption detail records that are built from issues and DORs processed for XB items that are not currently on bench stock. These details are maintained in the SBSS Data Base for 180 days, and if they are not recommended for addition, they are deleted. Once an item has been recommended for addition, it stays in the SBSS Data Base for 30 days. If at the end of the 30-day period, the item has not been added, the detail is deleted and consumption is lost.

When the bench stock support section receives a request to add items that aren't on the M04, you coordinate with the research or records maintenance unit to verify the requested stock number and unit of issue. The ISG listing is checked for the master stock number. You must review each item to ensure that all bench stock requirements are met. Once the item has been approved for addition, you process a 2BS input to load a master bench stock detail and action is taken to fill the bench stock.

Phase II. This phase deals with changes and recommended deletes. The bench stock review (S03) is used to conduct Phase II. The S03 is processed semiannually to review all bench stock items.

The bench stock support section arranges a semiannual joint review meeting with the major bench stock supported shops. This meeting is attended by Bench Stock, Materiel Control, and appropriate shop supervisors. The review should be scheduled so that it doesn't conflict with normally busy periods, such as end-of-month or end-of-year. A complete inventory and replenishment is accomplished within 15 days before the S03 is processed. The review must be concluded and normal support to the shops resumed as quickly as possible, but not more than 1 workweek.

All changes and recommended deletes are reviewed during the joint review and the S03 is annotated as appropriate and signed by the reviewers. Bench Stock keeps a copy of the signed listing until the next review.

After all necessary actions have been accomplished, Bench Stock provides (at a minimum) one copy of the organization bench stock listing (S04) to the applicable shop supervisor and Materiel Control. Bench Stock also files a copy with the signed listing from the joint review meeting.

A thorough review is extremely important to ensure that bench stocks effectively support the mission in the most efficient and economical manner.

SRD/MRA Validation. SRD data and MRA levels must be validated annually in conjunction with a semiannual bench stock review. After Phase II has been accomplished, you take the following action.

a. Send a cover letter signed by the COS, with a copy of the S04 to Materiel Control requesting a review of all SRD and MRA data. Completion of the review must be certified by the maintenance superintendent by indorsement.

b. Any changes resulting from this review are made to the master bench stock detail by the input of a 2BS.

c. Bench Stock files a copy of the indorsed review and uses it for verification of the annual review.

Exercises (440):

1. During what phase are items added?

2. What program recommends items for addition to bench stock?

3. What program is used to conduct Phase II?

4. Who attends the semiannual joint review meeting?

5. Within what time period before the S03 is processed, must you accomplish a complete inventory and replenishment?

6. How often are MRAs/SRDs validated, and who certifies that they have been received?

441. Cite change and delete actions which result from the S03.

Changes. Changes to the authorized quantity on existing master bench stock details are recommended during the semiannual review. The MRA/MAQ flag is considered as well as the consumption in computing the recommended levels.

Quantity changes are only recommended for substantial changes in consumption patterns. A substantial change is one in which the change exceeds the square root of the authorized quantity. Smaller changes aren't recommended by the review.

If the supported activity doesn't agree with the computed authorized quantity, an MRA/MAQ is requested. MRAs are justified by the requester. MRA recertification is accomplished through the review process.

Deletions. Items are deleted from bench stock under the following circumstances.

- When requested by the supported activity by either telephone or letter.
- As a result of joint review by the activity and the bench stock support section when the S03 lists items with no consumption in 180 days.

Deletions may be made at any time, regardless of the level computed by the S03. To do this, the using activity sends requests for deletions to the bench stock support section, giving the reason for deletion and the document numbers of the items to be deleted.

The S03 provides review cards for possible delete action. Cards are produced for items when the date of last demand (DOLD) is greater than 180 days, or if the computation of a new level results in a level of less than 1. (When the computed level is less than 1, a quantity of 1 appears on the review card.) If the computed bench stock level is 1 and the unit of issue is each, a recommended delete is also output.

The recommended deletions are reviewed jointly with a representative of the activity being supported. Items that don't have a MRA, and which, in the opinion of the organization representative, should not be deleted, are extended until the next review. TIN cards are made for items to be deleted and processed as follows:

Prepare an AF Form 2005 (TRIC TIN) in two copies and attach them to the property. Send the AF Forms 2005 and property to the receiving section. When the quantity available for turn-in is less than the unit of issue or unit pack, the items are not turned in, but are held in the shop for attrition or transferred to the defense reutilization marketing office (DRMO).

The organization bench stock listing (S04) is annotated to show which items are deleted. The activity has the final say as to whether an item is deleted or not. Items not justified by consumption usually require assignment of a MRA/MAQ.

Exercises (441):

1. What type of changes are recommended during Phase II?

2. What action should a supported activity take if they disagree with the computed authorized quantity?

3. When are items recommended for deletion?

4. How are bench stock items turned in?

442. State the purpose and frequency of the S04.

Organization Bench Stock Listing (S04). The S04 provides master and organization bench stock listings in either stock number, part number, or item number (organization bench stock listing only) sequence. Bin labels are produced either by organization code or organization and shop code. Items that have an authorized shelf-life code can have colored labels produced. The S04 is also used to control the assignment of bench stock item numbers and to assist shop personnel in locating bench stock items. The S04 is run after each semiannual review in item number sequence (fig. 5-1).

Exercises (442):

1. What products are produced by the S04?

2. What type of labels can be produced for items with authorized shelf-life codes?

3. When is the S04 run?

A	B	C	D	E	F	G	H	I	J	K				M	N	O	P
									STOCK NUMBER SEQUENCE								
C I	STOCK NUMBER		PART B/S	NUMBER LOCATION	DP MP	ORGSH	ITEM NR	NOUN	DMD LVLPRJ	B C	BIM LOC	DOLD	DOFD	PM UIKI	.... SL	QUANTITY... COMP	AUTH	I X	UNIT PRICE	EXT AUTH $ VALUE
U	2815P837161X706			NTMU	X	502PW	0075	BULB/CAPILL	0	9	075	2350	8090	EA11	1	0	1		$101.32	$101.32
U	2910000694500				A	502PW	0009	FILTER 2.06	0	9	009	1320	1286	EA11	2	0	2		$2.31	$4.62
U	2910007415400			CSUB	A	502PW	0001	PLATE,NOZ,1	0	9	001	5028	8181	EA11	6	1	6		$15.55	$93.30
U	2910007684164			CSUB	A	502PW	0028	SHIM, NOZZLE	0	9	028	8355	8181	EA11	6	0	6		$.36	$2.16
U	2910008312409			CSUB	A	502PW	0011	TIP,INJ,FS5	0	9	011	4255	7312	EA11	2	0	2		$38.10	$76.20
U	2910008952471			SCUB	A	502PW	0012	CAC NEEDLE	9	9	012	5102	7312	EA11	2	1	2		$14.71	$29.42
U	2910008974562			CSUB	A	502PW	0010	VALVE,10-32	0	2	010	5150	8181	EA11	6	1	6		$115.15	$690.90
U	2910009059792				A	735AG	0292	STRNRBDY,SE	10GYK	9	292	5113	4176	EA1		1	2		$4.12	$8.24
U	2910009452318				A	735AG	0147	FLTR,ELEM 1	8GYK	9	147	5127	4176	EA1		1	2		$5.12	$10.24
J	2920000100497			CSUB	A	503RF	0093	SPARK PLUG	49	9	093	3005	8311	EAA1	2	0	2		$.48	$.96
J	2920000100497				A	667VM	0003	SPARK PLUG	49RSA	9	003	4292	3300	EAA		2	3		$.48	$1.44
J	2920002935212				A	735AG	0143	PL,SPARK RE	29GYK	9	143	5120	4176	EAA		2	2		$2.08	$4.16
J	2920005408352				A	667VM	0010	PLUG,SPARK	136RSA	9	010	5134	5086	EAA		3	3		$1.02	$3.06
J	2920005408352				A	735AG	0007	PLUG,SPARK	136GYK	9	007	5134	4176	EAA		14	15		$1.02	$15.30
U	2940008825913			NTMU	A	502PW	0104	FLT ELEM3.7	250	9	104	5120	8216	EA11	152	73	152		$5.95	$904.40
*	2940008919342				A	735AG	0001	FILTER ELEM	46GYK	9	001	5034	4176	EAB		3	3		$2.36	$7.08
J	2940009860276				A	678VM	0023	FILTER OIL	71RSA	9	023	5149	4176	EAB		2	2		$1.40	$2.80
J	2940009860276				A	735AG	0153	FILTER OIL	71GYK	9	153	5127	4176	EAB		2	2		$1.40	$2.80
U	2940P1096X155				A	502PW	0081	ELEMENTASSY	0	9	081	5135	12880	EA11	4	0	4		$93.08	$372.32
U	2940P88062A				X	502PW	0107	FILTER FUEL	0	9	107	3213	0016	EA11	24	4	24		$9.07	$217.68
U	2940P88209-A				A	502PW	0099	ELEMENT,FUE	0	9	099	5086	5038	EA01	12	2	12		$8.21	$98.52
U	2940PARF8X8				A	502PS	0102	BOX AIR ELE	0	9	102	5002	5038	EA11	12	1	12		$60.44	$725.28
U	2990004018394			CSUB	A	502PW	0014	RING 5413-0	0	9	014	7354	7312	EA11	6	0	6		$.59	$3.54
U	3010002945757				A	696AW	0029	COUP FLEXSK	7FAL	9	029	5169	5116	EA0		1	2		$11.75	$23.50

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Figure 5–1. Master Bench Stock Listing (extract).

CHAPTER 6

Materiel Control

SUPPLY AND MAINTENANCE functions are closely related in many ways. The nature and scope of the maintenance to be performed on any item is an important factor in requirements planning. At base level, maintenance is the most important supply customer.

The mutual dependence of Supply and Maintenance emphasizes the need for close coordination of the two functions. At the same time, achieving adequate support for maintenance is a challenge to the inventory manager because of the size of Air Force maintenance operations and the varied nature of maintenance demands. In this chapter, we discuss Materiel Control's responsibilities.

The demand processing unit works closely with Materiel Control, which is located in Maintenance. Under the SBSS, Materiel Control is staffed with supply and maintenance personnel. Two of the units within Materiel Control are Maintenance Supply Liaison (MSL) and Production Control/Reparable Processing Center (RPC).

MSL is primarily responsible for management of maintenance actions, providing assistance to maintenance personnel in resolving problems with supply support, verification, and monitoring urgency of need designators (UND) A and B requirements. MSL ensures that the proper parts, tools, and equipment are available to the maintenance activities in the required quantities at the proper time. The ability to forecast the supply requirements of each maintenance activity and the use of effective followup procedures ensures that the responsibilities of the MSL are met.

Production Control/RPC is responsible for controlling all reparable assets within the maintenance complex. This control consists of accomplishing turn-ins from Maintenance to Supply, coordinating on all DIFM matters with Supply, performing asset availability for UND A and B requirements, and conducting a monthly DIFM reconciliation.

The function of Materiel Control is to keep maintenance activities informed of supply and equipment support. The efforts of this activity must be continually directed toward increasing the maintenance output. When materiel cannot be supplied through informal channels, Materiel Control, in coordination with the operations support branch, investigates all possible sources for the required items. Coordination is the key to successful supply support. Supply must work closely with materiel control personnel to ensure that they know the status of the items that Maintenance has requested and any problems encountered in the transaction.

6-1. Maintenance Materiel Control

Materiel Control is part of the maintenance organization. Its functions are to provide coordination between Maintenance and Supply, to manage supply transactions for the maintenance complex, and to monitor the production of assets in the repair cycle. Maintenance Materiel Control is comprised of two functions, Maintenance Supply Liaison (MSL) and Production Control.

443. Specify the functions of Maintenance Materiel Control.

Maintenance Supply Liaison (MSL). MSL ensures that proper parts, tools, and equipment are available to maintenance activities in the required quantities at the proper time. The basic requirements are the ability to forecast the supply requirement of each maintenance activity and the ability to take effective followup action so that Maintenance can fulfill their mission. MSL is primarily concerned with resolving supply problems, confirming maintenance supply data and status, and forecasting supply requirements for the maintenance activities.

Responsibilities. As an MSL clerk, you act as the go-between or liaison between Maintenance and Supply. Here are some of your detailed responsibilities.

a. Verifying and monitoring UND "A" and UJC "BQ" requirements, except for awaiting parts (AWP) requirements.

b. Advising the Materiel Control supervisor and other affected personnel of the overall supply situation as it affects Maintenance.

c. Establishing a system, in conjunction with Supply, for effectively programming parts, tools, and equipment requirements for maintenance and assisting in obtaining the authorizations required.

d. Operating designated tool cribs.

e. Coordinating on the establishment of bench stocks and adjusted stock levels.

f. Participating in maintenance preinspection planning meetings.

g. Processing requirements for time change items and time compliance technical order (TCTO) parts or kits, and coordinating with Supply to ensure that required items are delivered in a timely manner.

h. Reconciling due-outs (deferred discrepancies awaiting parts) reflected on weapon and support system documents.

i. Establishing and operating designated due-out release delivery points and maintaining tail number bins (TNB).

j. Recommending cannibalization requests. Reviewing the R49 to ensure that all cannibalizations are reported in a timely manner.

k. Monitoring the AFLC critical and base/command intensive management program.

l. Ensuring that maintenance personnel know the procedures for the automatic issue of interchangeable items and taking necessary action to delete unsuitable items form the interchangeability and substitute (I&S) group list.

m. Reviewing supply delivery times to ensure adequate response to maintenance repair priorities.

n. Coordinating with Base Supply to ensure the loading and updating of initial spares support lists (ISSL) for new weapon system or subsystems.

o. Coordinating with the maintenance activity on items requiring supply difficulty letters and submitting supply difficulty requests in accordance with AFM 67–1, Volume 1, Part 1.

p. Performing necessary followup to resolve parts shortages.

q. Maintaining deferred discrepancy due to parts files and AF Form 2414, Verification Worksheet, for UND A and B requests that are still active or in the process of verification (fig. 6-1).

r. Participating in the joint bench stock review.

Production Control. Production Control is responsible for shop scheduling and either a reparable processing center (RPC) or a reparable asset control center (RACC). The goal of an effective shop workload scheduler is to reduce the reparable processing time. By reducing the reparable processing time, there is a reduction in the total assets needed to support the base mission. Processing time can be reduced by ensuring that repair parts are available and that repaired assemblies are returned to a serviceable condition as soon as possible. The S1100/60 produces reports and listings that are valuable management aids in efficient movement of reparable assemblies through the repair cycle.

Responsibilities. As a production control clerk, your responsibilities include the following.

a. Establishing pickup points within the maintenance activity with the coordination of maintenance supervisors.

b. Monitoring the flow of reparable assets through the maintenance complex and resolving conflicts in repair cycle processing.

c. Ensuring that supply point items requiring buildup prior to issue are processed in a timely manner.

d. Turning in serviceable, condemned, and not reparable this station (NRTS) components from Maintenance to Supply.

e. Coordinating all due-in from maintenance (DIFM) matters with the repair cycle support section.

f. Performing asset availability checks on all reparable items when requested by MSL.

g. Processing requests for and managing local manufacture of approved items.

h. Picking up and delivering reparable assets within the maintenance complex.

i. Conducting a quarterly DIFM reconciliation with the repair cycle support section.

j. Collecting and submitting data required to produce the maintenance repair capability report.

k. Monitoring and documenting abuses of maintenance repair priorities and notifying the maintenance control supervisor of adverse trends.

l. Coordinating with shop supervisors in identifying items that require buildup and/or functional check prior to issue and installation.

m. Performing followup action to resolve AWP problems.

n. Participating in the maintenance planning cycle. You provide production scheduling (on a daily basis) by workcenter of the hours remaining on in-work items, and the in-shop production personnel hours required for the next 24 hours.

o. Operating storage areas for AWM and, when required, for AWP items. Identifying storage areas for large items and providing adequate security and control.

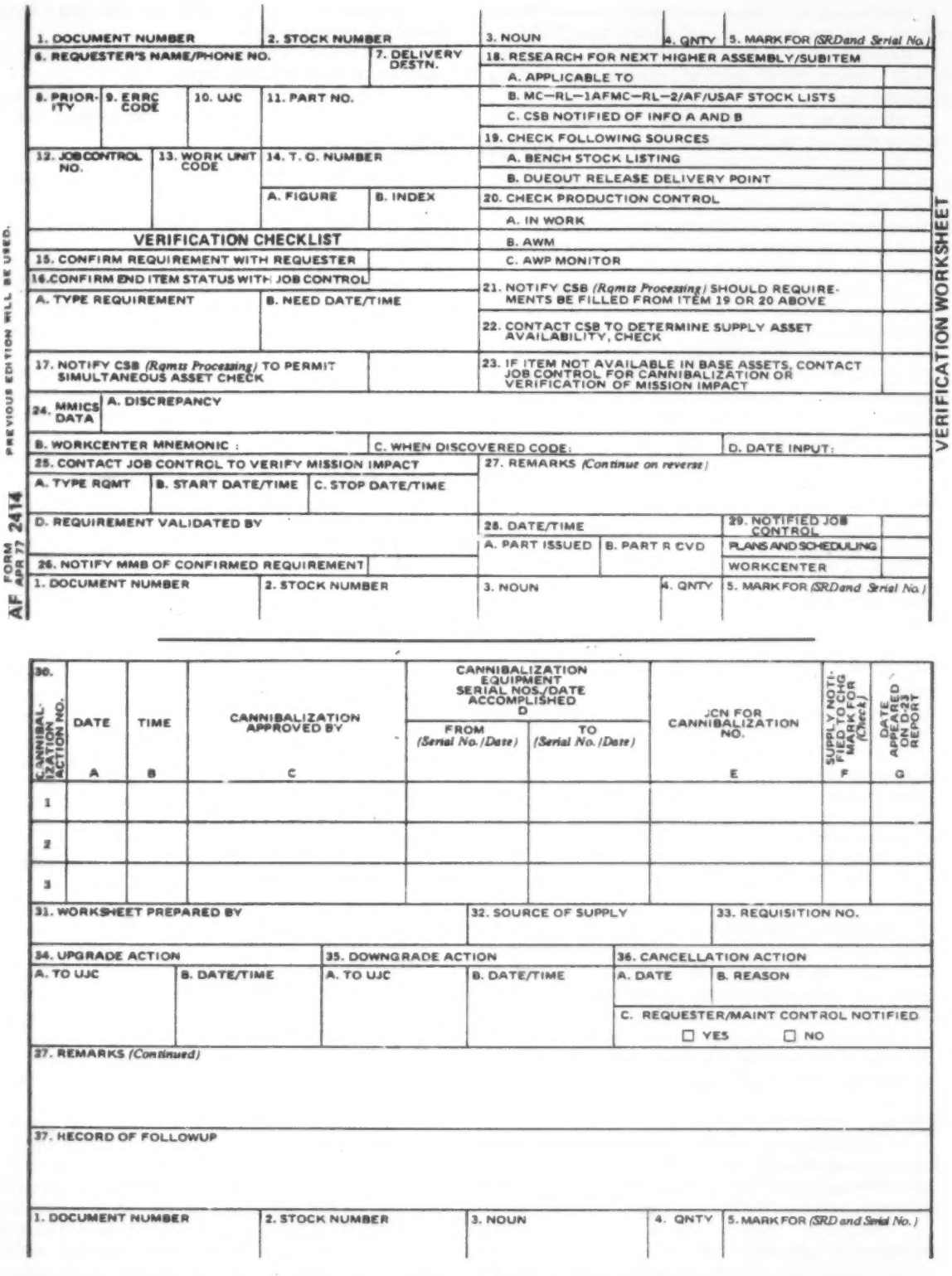
p. Supporting tenant units as required.

q. Managing the production scheduling program which includes assigning in-shop priorities, controlling in-shop work, and scheduling commodity time compliance technical orders.

Exercises (443):

1. Match the functions of Maintenance Materiel Control in column B with the appropriate responsibilities in column A.

Column A	*Column B*
____ (1) Processes time change and TCTO requirements.	a. Maintenance Supply Liaison.
____ (2) Participates in the maintenance planning cycle.	b. Production Control.
____ (3) Coordinates all DIFM matters with the repair cycle support section.	
____ (4) Establishes and operates designated due-out release delivery points.	
____ (5) Supports tenant units.	
____ (6) Participates in maintenance preinspection planning meetings.	
____ (7) Operates designated tool cribs.	
____ (8) Processes requests for and manages local manufacture of approved items.	



AF FORM 2414 APR 77 PREVIOUS EDITION WILL BE USED.

VERIFICATION WORKSHEET

1. DOCUMENT NUMBER	2. STOCK NUMBER	3. NOUN	4. QNTY	5. MARK FOR (SRD and Serial No.)
6. REQUESTER'S NAME/PHONE NO.	7. DELIVERY DESTN.	18. RESEARCH FOR NEXT HIGHER ASSEMBLY/SUBITEM		
		A. APPLICABLE TO		
8. PRIORITY / 9. ERRC CODE / 10. UJC / 11. PART NO.		B. MC–RL–1AFMC–RL–2/AF/USAF STOCK LISTS		
		C. CSB NOTIFIED OF INFO A AND B		
		19. CHECK FOLLOWING SOURCES		
12. JOB CONTROL NO. / 13. WORK UNIT CODE / 14. T. O. NUMBER		A. BENCH STOCK LISTING		
		B. DUEOUT RELEASE DELIVERY POINT		
A. FIGURE / B. INDEX		20. CHECK PRODUCTION CONTROL		
VERIFICATION CHECKLIST		A. IN WORK		
		B. AWM		
15. CONFIRM REQUIREMENT WITH REQUESTER		C. AWP MONITOR		
16. CONFIRM END ITEM STATUS WITH JOB CONTROL		21. NOTIFY CSB (Rqmts Processing) SHOULD REQUIREMENTS BE FILLED FROM ITEM 19 OR 20 ABOVE		
A. TYPE REQUIREMENT / B. NEED DATE/TIME		22. CONTACT CSB TO DETERMINE SUPPLY ASSET AVAILABILITY, CHECK		
17. NOTIFY CSB (Rqmts Processing) TO PERMIT SIMULTANEOUS ASSET CHECK		23. IF ITEM NOT AVAILABLE IN BASE ASSETS, CONTACT JOB CONTROL FOR CANNIBALIZATION OR VERIFICATION OF MISSION IMPACT		
24. MMICS DATA / A. DISCREPANCY				
B. WORKCENTER MNEMONIC :	C. WHEN DISCOVERED CODE:	D. DATE INPUT:		
25. CONTACT JOB CONTROL TO VERIFY MISSION IMPACT		27. REMARKS (Continue on reverse)		
A. TYPE RQMT / B. START DATE/TIME / C. STOP DATE/TIME				
D. REQUIREMENT VALIDATED BY		28. DATE/TIME	29. NOTIFIED JOB CONTROL	
		A. PART ISSUED / B. PART RCVD	PLANS AND SCHEDULING	
26. NOTIFY MMB OF CONFIRMED REQUIREMENT			WORKCENTER	
1. DOCUMENT NUMBER	2. STOCK NUMBER	3. NOUN / 4. QNTY	5. MARK FOR (SRD and Serial No.)	

30. CANNIBALIZATION ACTION NO.	DATE A	TIME B	CANNIBALIZATION APPROVED BY C	CANNIBALIZATION EQUIPMENT SERIAL NOS./DATE ACCOMPLISHED D: FROM (Serial No./Date)	TO (Serial No./Date)	JCN FOR CANNIBALIZATION NO. E	SUPPLY NOTIFIED TO CHG MARK FOR (Check) F	DATE APPEARED ON D-23 REPORT G
1								
2								
3								

31. WORKSHEET PREPARED BY	32. SOURCE OF SUPPLY	33. REQUISITION NO.

34. UPGRADE ACTION		35. DOWNGRADE ACTION		36. CANCELLATION ACTION	
A. TO UJC	B. DATE/TIME	A. TO UJC	B. DATE/TIME	A. DATE	B. REASON
				C. REQUESTER/MAINT CONTROL NOTIFIED ☐ YES ☐ NO	

37. REMARKS (Continued)

38. RECORD OF FOLLOWUP

1. DOCUMENT NUMBER	2. STOCK NUMBER	3. NOUN	4. QNTY	5. MARK FOR (SRD and Serial No.)

Figure 6–1. AF Form 2414 (front and back).

6-2. Communication Materiel Control

Communication Materiel Control coordinates with support agencies and assists maintenance personnel in expediting all supply transactions. Materiel Control ensures that required parts, tools, and equipment are available to Maintenance at the proper time. The efforts of Materiel Control must be continually directed toward maintenance support.

444. Cite the responsibilities of Communication Materiel Control.

Materiel Control. Materiel Control does not act as an organizational supply support function except for those mobile/combat units needing complete self-sufficiency. In mobile/combat units, Materiel Control provides total organizational supply support while deployed. Materiel Control personnel are not assigned custodial responsibility for tools, test equipment, administrative equipment, and supplies located in the maintenance workcenters. Materiel Control may consist of four functions: Maintenance Supply Liaison, Reparable, Processing, Mobility Support, and Organizational Supply Support.

Maintenance Supply Liaison (MSL). MSL ensures that proper parts, tools, and equipment are available to Maintenance in the required quantities at the proper time. The basic requirement for fulfilling these responsibilities is the capability to forecast the supply requirements of the maintenance activity and make effective followup to ensure that plans and schedules are not delayed for lack of supplies. MSL is primarily concerned with resolving supply problems, confirming maintenance supply data and status, forecasting supply requirements for maintenance, and participating in maintenance meetings to assist in developing maintenance schedules.

Reparable Processing. Reparable Processing is responsible for off-equipment reparables and for their control while undergoing repair. Application of the SBSS or ALC computer system to control repair cycle assets enables you to maintain current item location and condition status. This capability allows precise scheduling for reduced reparable processing time with sufficient reduction in total assets required.

Mobility Support. Mobility Support applies only to those units with a mobility mission. This function coordinates initial spares requirements for the WRSK or MSK. It is the single point of contact between the appropriate maintenance activity for approved or revised WRSK and MSK requirements.

Organizational Supply Support. Organizational Supply Support applies to those units with a mobility mission requiring complete self-sufficiency. They coordinate all equipment transactions and requirements with the host equipment management section. Property account custodians, appointed by the commander, receipt for property under their accounts. Organizational Supply Support arranges with the equipment management section to receive a quarterly Consolidated Custody Receipt Listing (R23) for monitoring purposes. They also advise the commander of the availability of all equipment and supplies not in direct support of maintenance and act as the single point of contact for these supply transactions.

Responsibilities. Most of the responsibilities of the Maintenance Materiel Control apply to the Communication Materiel Control. Some of the additional responsibilities are as follows:

a. Forecasting supply and equipment requirements to ensure that the priority system isn't abused.

b. Maintaining a file of supply catalogs and administrative or technical publications.

c. Reviewing, maintaining, and using base supply reports and listings to track supply status and to measure supply effectiveness.

d. Visiting onbase workcenters at least monthly to give Supply guidance and assistance. Offbase activities, assigned a supply person (645XX), are visited annually. Those without a supply person are visited semiannually.

e. Augmenting quality control (QC) in performing activity inspections.

f. Acting as the AWP and EIP (equipment inoperative for parts) monitor.

g. Acting as the critical item and command/intensive management item monitor.

h. Assisting the chief of maintenance, maintenance property custodians, and the unit programmers (communication authorization program (CAP)) concerning equipment management.

i. Assisting QC and the traffic management office (TMO) with reporting items that are damaged in shipment.

j. Acting as the precision measuring equipment (PME) coordinator for the maintenance complex and transporting PME to and from the precision measuring equipment laboratory (PMEL) when directed by the Maintenance Control supervisor.

k. Using an AF Form 2413, Supply Control Log, or an AF Form 2005 to record issue requests made by Materiel Control.

l. Ensuring that training requirements identified in AFR 50–10, *Base Level Supply Customer Training,* are complied with.

m. Cancelling supply requests that are no longer required and coordinating with the host COS to firm up memo due-outs.

n. Acting as the turnaround (TRN) monitor for the maintenance complex.

o. Assisting QC when processing materiel deficiency report (MDR) exhibits.

p. Acting as the zero overpricing monitor and maintaining a file of price challenges that were forwarded to Base Supply.

q. Acting as the reusable container monitor for the maintenance complex.

r. Coordinating on local ERRCD changes.

Exercises (444):

1. Match the functions of Communication Materiel Control in column B with the appropriate responsibilities in column A.

Column A	*Column B*
____ (1) Responsible for reparables.	a. Mobility Support.
____ (2) Coordinates initial spares requirements for WRSK or MSK.	b. Maintenance Supply Liaison.
____ (3) Confirms maintenance supply data and status.	c. Organizational Supply Support.
____ (4) Coordinates all equipment transactions and requirements with the host equipment management section.	d. Reparable Processing.
____ (5) Capability to forecast supply requirements for maintenance.	
____ (6) Single point of contact for approved or revised WRSK and MSK requirements.	
____ (7) Units with a mobility mission requiring complete self-sufficiency.	
____ (8) Ensures that parts, tools, and equipment are available to Maintenance.	

6-3. Base Civil Engineers Logistics (BCE)

Base Civil Engineers Logistics serves as the focal point in Civil Engineering for all items of supply and equipment transactions. They maintain AF Forms 1445, Materials and Equipment List, for BCE work and job order materiel requirements.

445. State the policies and responsibilities of BCE Logistics.

BCE Logistics. All requirements for BCE materiel are funneled to this section, which submits the requirements to Base Supply. Base Supply is the source for all BCE materiels and equipment except for selected items that are obtained through contractor operated civil engineer supply stores (COCESS).

The AF Form 1445, Materials and Equipment List, is used for all BCE materiel requests except for base service stores (BSS) or individual equipment (IEU) items, and in some cases emergency requirements.

BCE Logistics is located near or adjacent to the planning section and production control center for the purpose of coordinating on materiel status, research, and forms preparation.

A supply support facility (warehouse) is located within or near the BCE area. It is staffed by base supply personnel and is stocked with common items of which BCE is the primary user (IEX G items).

A terminal is usually located within BCE Logistics to provide them with the capability for immediate input of BCE requirements and knowledge of asset availability, based on the issue notice, kill, or back order.

A BCE holding area is established for the binning of materiel requested for job/work orders. A periodic review, at least quarterly, is made of work orders in the holding area to ensure that materiel for valid work orders is on hand.

Responsibilities. Here are some of the responsibilities of BCE Logistics.

a. Assisting, planning, and preparing materiel requirements.

b. Exercising surveillance over engineer shop stocks in coordination with shop personnel and supply elements.

c. Processing BCE turn-in of materiels and determining appropriate cost data that is entered in BEAMS (base engineer automated management system).

d. Updating the production control center charts as required to reflect accurate materiel status.

e. Managing the BCE holding area, including the residual holding area.

f. Serving as the sole input source for materiel cost transactions to BEAMS.

g. Operating a central bench stock.

h. Serving as the focal point for all actions regarding COCESS operations to include being the technical representative to the contracting officer.

i. Controling and requisitioning handtools and clothing items for all BCE shops.

j. Ensuring the proper use of all vehicles and equipment.

k. Researching stock numbers, nomenclatures, prices, and data for materiel requisitioning.

l. Providing status to the base civil engineer on materiel requirements.

m. Coordinating on equipment requests for BCE.

n. Serving as the quality assurance evaluator (QAE) for the contract automotive parts store (COPARS).

o. Monitoring the DIFM program.

p. Operating the base U-Fix-It/Self-Help Store for BCE.

Exercises (445):

1. How often do you review work orders in the holding area?

2. What IEX code identifies items that are used primarily by BCE?

3. Other than Base Supply, what source provides items to BCE?

4. What activity is responsible for the input of materiel cost transactions into BEAMS?

6-4. Vehicle Maintenance Materiel Control

Vehicle Maintenance Materiel Control serves as a liaison between Transportation and Supply (SBSS and COPARS). They manage supply transactions and control reparables for Transportation.

446. Specify the policies and responsibilities of vehicle maintenance Materiel Control.

Materiel Control. All efforts of materiel control personnel are directed toward supporting vehicle maintenance. They continually review the needs of the shop with Maintenance Control, the vehicle maintenance officer (VMO), and the superintendent; they translate these needs to gain the needed supply support. Materiel Control must be proficient in coordinating between the supply systems and the Vehicle Integrated Management System (VIMS) to be sure materiel costs are properly recorded.

The VMO makes sure that supply functions unrelated to shop needs are not given to Materiel Control. Neither should Materiel Control personnel be assigned as the functional area manager (FAC).

Responsibilities. Some of the responsibilities of the vehicle maintenance Materiel Control are as follows:

a. Manage and operate the toolcrib.

b. Make, monitor, and followup (as needed) on part requests sent to Base Supply or COPARS.

c. Check daily and verify the need for all parts for mission capability (MICAP) reportable vehicles and vehicles deadlined for parts (VDP).

d. Check, verify, and revalidate all part requirements on deferred work orders.

e. Temporarily store and issue parts and supplies needed for work orders, and tell the controller of parts availability.

f. Advise the FAC (VMO or superintendent) of COPARS operation problems.

g. Keep a daily record of COPARS funds on AF Form 1834, COPARS Fund Ledger (LRA), and tell the FAC when 85 percent of the cost of the delivery order has been obligated.

h. Make sure all materiel costs are charged in the VIMS.

i. Make sure the parts requested are economical; order the least expensive item (including rebuilt items) when workshop records do not show poor performance, service life, or reliability.

j. Coordinate with supply on initial spares support list (ISSL) and follow-on supply support list (FOSSL).

k. Fill out Materiel Control's portion of the AF Form 1832, Record of Cannibalization (Vehicle Maintenance).

Exercises (446):

1. Vehicle maintenance Materiel Control must be proficient in coordinating with what two systems to ensure materiel costs are properly recorded?

2. What percent of funds have to be obligated for items obtained through COPARS before the FAC is notified?

3. How often is the need for parts for MICAP vehicles checked?

6-5. Materiel Control Management

So far you have read about four types of materiel control. They basically have the same responsibilities of ensuring that maintenance receives good supply support and that the workcenters practice supply discipline. In order to do an effective job as a materiel control clerk, you should be familiar with the different management aids available. This section discusses some of the management products that you can use to do a good job.

447. Identify management aids used by Materiel Control and state the importance of good supply discipline.

Reports and Listings. Various reports and listings are available from the S1100/60 and other systems. Some of these reports are automatically distributed to maintenance functions; others are produced and distributed based on local requirements. All available reports are in AFM 67-1, Volume 2, Part 2. Materiel Control and the workcenter use these reports and listings for control of maintenance and supply transactions. The following paragraphs explain the most pertinent products.

a. Supply provides the Priority Monitor Report/Due-Out Validation (D18/M30) to MSL. The D18 is furnished daily for UND A requirements, weekly for UND A and B requirements except bench stock, equipment, and supply point requirements, and monthly (M30) for all UND A, B, and C requirements, except bench stock, and equipment and supply point requirements. It lists outstanding due-outs for each item required for serial-numbered aerospace vehicles, engines, support equipment, and test measurement diagnostic equipment (TMDE), and contains the latest supply status for each due-out item. It also provides the capability for validating backordered parts requirements in the deferred due to parts file.

b. The DIFM listing (R26) provides a product to manage DIFM assets, maintain current inventory of DIFM items, and reconcile DIFM detail balances with the applicable maintenance shops and flight line.

c. The daily document register (DO4) is produced to assist MSL, organizations, and shops in monitoring their requirements. The DO4 provides a listing of document numbers charged to a specific organization processed through the S1100/60 during the previous day. The DO4 should be reviewed daily for due-out releases and cancellations.

d. The organizational bench stock listing (SO4) is a listing of all bench stock items authorized for applicable shops. You use this listing to control the assignment of bench stock items. A master bench stock listing can be produced in stock or part number sequence. An organizational bench stock listing is also available in stock, part, or item number sequence.

e. The supply point listing (Q13) provides a listing of all authorized prepositioned items at supply points with the quantity authorized, on hand, and due-out.

f. The stock number directory (M14) provides a record of all stock numbers loaded in the SBSS Data Base and is produced monthly. Supply furnishes Materiel Control one copy of the previous month's listing when sufficient copies are available. This listing provides Materiel Control with the capability to determine what specific supply items are loaded in the S1100/60 and other indicative data for management decisions.

g. The organizational effectiveness report (M24) reflects the supply issue effectiveness for the month in the percentage of fill rate. It includes supply point, bench stock, and other issue and due-out effectiveness.

h. The repair cycle data listing (Q04) complements the DIFM Listing for scheduling repair cycle assets, determining the base repair capability, and DIFM control. You use it to determine the number of units repaired and condemned for the past year and to identify the current quarter turn-ins by type action taken code. Potential problem areas may be indicated by identifiable trends.

i. The TCTO reconciliation listing provides Maintenance and the repair cycle support section with a listing of TCTO kit availability, shortages, excesses, due-outs, due-ins, and status. You use this product as a tool for identification and reconciliation of differences between the S1100/60 and maintenance TCTO documents.

j. Review the adjusted stock level review listing (R35). These listings provide information on all items with adjusted stock levels. The maintenance control supervisor or designated representative certifies the adjusted stock level requirements on the listings after any necessary review by Materiel Control and affected workcenter supervisors.

k. The bench stock recommended additions listing (M04) provides monthly bench stock add cards and a listing. It allows the bench stock support section and individual organizations a means to review items recommended for addition based on consumption. It also provides selected bench stock cost data.

l. The AWP validation listing (D19) provides a listing of AWP due-outs with applicable due-ins and status for DIFM items in AWP status. It provides supply and maintenance managers with the statistics to determine the status of the AWP program. It also shows the status from the applicable source of supply for the bit and piece requirement.

m. The interchangeability and substitute group listing (R02) determines interchangeable and substitute items. The stock numbers of the items that appear on the stock number directory (M14) are linked in the S1100/60 to the master item when they are either interchangeables or substitutes.

Supply Discipline. Supply discipline is essential to successful materiel management and applies to both maintenance and supply personnel. Maintenance personnel must clearly understand that:

a. A reparable item is as important as a serviceable item, since the reparable may represent the only source of supply. Reparable components removed from the end item must be processed into repair channels promptly and controlled throughout the repair cycle. Documentation for all reparable or serviceable items entering or leaving a maintenance shop must be processed through the appropriate production control scheduler.

b. Double-ordering wastes funds reduces credibility and will not be condoned. When double-ordering is discovered, you should take immediate action to cancel the erroneous request.

c. A valid delivery priority must be assigned to each demand placed upon the supply system. The delivery priority is normally identical to the maintenance repair priority of the equipment for which the part is needed. All levels of supervision share the responsibility for maintaining an effective and credible priority system.

Exercises (447):

1. Match the use in column A with the report or listing in column B.

Column A	*Column B*
____ (1) Provides data on items with adjusted stock levels.	a. D04.
____ (2) Used to manage DIFM assets.	b. D18.
____ (3) Provides statistics to find the status of the AWP program.	c. D19.
____ (4) Reflects the transactions that processed through the S1100/60 the previous day.	d. M04.
____ (5) Provides a listing of stock numbers loaded in the SBSS Data Base.	e. M14.
____ (6) Provides a listing of items authorized on a supply point.	f. M24.
____ (7) Used to find the base repair capability of an item.	g. M30.
____ (8) Lists all authorized items on bench stock.	h. Q04.
	i. Q13.
	j. R02.
	k. R26.
	l. R35.
	m. S04.

2. Why is a reparable item as important as a serviceable item?

3. What action do you take when you discover double-ordering?

4. Who shares the responsibility for maintaining an effective and credible priority system?

Answers for Exercises

CHAPTER 1

Reference:

400 – 1. Hand-carried, mailed, or transmitted by radio, telephone, intercom, teletype, or terminal.
2. TO data or other appropriate references.
3. Routine call-in point.

401 – 1. (1) a.
(2) g.
(3) d.
(4) j.
(5) i.
(6) e.
(7) b.
(8) c.
(9) d.
(10) e.
(11) k.
(12) f.
(13) h.
(14) i.
2. Copy two of the AF Form 2005 or preserial numbered AF Forms 2005.

402 – 1. Delivery priority of the request.
2. Expedite.
3. Effective reduction of UMMIPS violations and the costs of priority requirements.
4. Requests with UJC AO or AR, UND B (except BQ), and they are processed as fill or backorder.
5. Requests with UND A, except AO and AR, and UJC BQ.
6. DPU notifies the requesting activity and they both begin the verification process.
7. I004.
8. I005/I006.
9. I023.
10. I019.
11. I017.

403 – 1. The phase declared by the COS.
2. The item requested, along with all of the items in the ISG of that NSN.
3. After any required exception processing is completed.
4. 6.
5. Card column 1–3 contains DUO.
6. Requests are sent to the post-post control team for input after recovery.

404 – 1. MICAP checklist.
2. 90 calendar days after termination of the MICAP condition.
3. Materiel Control or the requesting activity.
4. Identifies total base asset position of the requested item.
5. I, J, or /.

405 – 1. Removal of a part from one end item for installation on another end item.
2. MICAP worksheet or a locally developed form/register.
3. Obtaining a part from another base to satisfy a requirement rather than getting the property from the source of supply.
4. SPR.
5. Priority Monitor Report (D18), Part V.

406 – 1. R49.
2. NOR card.
3. At the time that the due-out is released, cancelled, or downgraded to a non-MICAP condition.
4. B9x.
5. When a due-in is established to satisfy a MICAP condition, or when an existing requisition is upgraded to a MICAP condition.
6. To report the initiation, termination, or change of a MICAP condition.
7. AFLC, MAJCOMs, and subcommands.

CHAPTER 2

407 – 1. It lists the current Federal catalog system publications used by the Air Force and provides guidance for getting these publications.
2. a. 1 May 85.
b. 1 Jan 85.
c. Quarterly (Jan, Apr, Jul, and Oct).
3. TO 0–1–01.
4. TO 0–1–02.

408 – 1. H2.
2. H2–1, Part 1.
3. H2–2, Part 2.
4. H4 series.
5. H6.
6. H7.
7. Steam Turbines and Components.
8. Included.
9. 28026.
10. Aimes Div. Introl. Corp. of Lockport, IL.
11. 8405.

409 – 1. In alphanumeric sequence by manufacturer's reference number.
2. To cross reference/part numbers to NSNs.
3. National item identification number (NIIN).
4. To cross-reference NSNs to reference/part numbers.
5. In the *Part Number History File*.
6. 7105–00–813–8995.
7. A–5R4, AB5R–4, H–1158–J, 51782C, 5187C2.
8. 007–5045–28 or 1–4M24Z5.

410 – 1. J05.
2. $26.65.
3. ea.
4. To provide requisitioners with the data needed to acquire and account for an item of supply.
5. To provide descriptive, reference, and illustrative data to identify or select items of supply and to facilitate interservice supply support for items in the commodity area.

411 – 1. To select and aggregate into homogeneous groups and subgroups all NSN items for which the Air Force has established a user interest.
2. To exhaust the stocks of least desirable items before the master item is used.
3. AA.
4. 3110001982032; has a NPPC of 2.

412 – 1. TO lists part numbers, nouns, and other data necessary to support the particular type of equipment to which it applies.
2. TO system.
3. Table of Contents, Introduction, Group Assembly Parts List, and Numerical Index.
4. P2.
5. Bell Crank Assy, Main Landing Gear Shrink LH.
6. 1–35–40.
7. Research unit.
8. AFTO Form 110.
9. Changes, revisions, supplements, appendices, and recissions.

CHAPTER 3

413 – 1. After a management or reject notice is output indicating that the item record is not in the SBSS Data Base.
2. AF Forms 1530 or 1991, or the source document if the research unit has a terminal.
3. ML–C.

414 – 1. That the source documents contain all of the necessary data elements.
2. FSC.
3. Non-NSN control file of DD Forms 1348–6.
4. Stock Number Directory, document and transaction registers, etc.
5. Non-stock listed (NSL).
6. DD Form 1348–6.
7. DD Form 1348–6.

415 – 1. To automate the part number to stock number cross-reference file.
2. At the time of a new item record load for all NSN and P serialized stock numbers that result from a part number request.
3. 1AA.
4. Research unit loads. The records maintenance unit changes or deletes.
5. 1–32.
6. The part number cannot be edited under program control and will remain loaded as it is input.

416 – 1. Records maintenance unit.
2. FIC.
3. AF Form 86 action, stock list changes, or to correct erroneous file maintenance data on original FIL inputs.
4. Internal by file status processing and external by FID processing.
5. FNL.
6. There is an * in the first position of the nomenclature field.
7. FCU.
8. To stop SBSS ADS processing of certain transactions against the item record and associated detail records, TRIC FFC.

417 – 1. To identify items with like physical and functional characteristics that provide compatible functional performance.
2. To provide bases with the widest range of relationships which are suitable for local use.
3. 45.
4. FIS.
5. Records maintenance unit.
6. Research the consolidated transaction register for the past 6 months and look for issues/due-outs.
7. The relationship is established (FIS) and the correspondence is kept on file for as long as the relationship is effective.

418 – 1. (1) c.
(2) a.
(3) f.
(4) b.
(5) e.
(6) d.
2. (1) e.
(2) a.
(3) b.
(4) d.
(5) c.

419 – 1. M24.
2. Q05.
3. Q04.
4. R08.
5. R03.
6. ROF.
7. M14.
8. R02.

420 – 1. File maintenance transaction suspense file, stock list change suspense file, reject suspense file, and freeze code suspense file.
2. File maintenance transaction suspense file.
3. Reject suspense file.
4. Freeze code suspense file.

421 – 1. Provides automatic update of stock control data for bases enrolled in the D071 system.
2. Records maintenance unit SNUD monitor.
3. Monthly, during the second week of the month prior to the effective date.
4. Annually.

CHAPTER 4

422 – 1. XD or XF.
2. When a repair cycle asset has been issued or backordered as a replacement.
3. One each.
4. Multiple DIFM flag.
5. It normally begins with the removal of the unserviceable or suspected unserviceable from the end item and a demand is placed upon Base Supply for a replacement. It normally ends when a like item is physically returned serviceable or unserviceable to Base Supply for disposition.
6. (a) o
(b) 1
(c) 2.

423 – 1. To manage DIFM assets, maintain a current inventory of DIFM assets, and to reconcile DIFM detail balances with the applicable maintenance activities.
2. An * in the DL column.
3. R26.
4. Nine days.
5. Updating the responsible repair shop code, DIFM location, and DIFM status code on the DIFM detail.
6. R26.

424 – 1. To provide sufficient space and facilities for accommodating the supply point.
2. When authorized by the operations support officer.
3. FSP.
4. 005.
5. 01–99, 01–10.
6. 4E.
7. Base Supply.
8. S, 005, N.

425 – 1. MSI.
2. Use TEX code F in cc 54 of the MSI request.
3. To assign sequential serial numbers to cc 36–39 of each supply point issue. This allows multiple issues of a single DIFM item during 1 day's processing.
4. Over the counter.
5. Post-post, TEX code 6.

426 – 1. Copy 4 of the original issue or due-out release document that was signed and dated by the supply representative.
2. Copy 3 of the original issue or due-out release document and an AFTO Form 350.
3. 3, TIN.
4. When the property is serviceable and is needed to satisfy existing due-outs.
5. By coordination with Stock Control.

427 – 1. Quarterly.
2. If the suspense copy is dated as of or prior to the date of the listing and is not on the listing.
3. You prepare a DD Form 1348-1 for the missing copy.
4. Repair cycle support section.
5. Supply point listing (Q13).
6. When the onhand plus due-out quantity is less than the authorized quantity.

428 – 1. D19.
2. D19 totals.
3. Cannibalization, local purchase, supply difficulty letters, followups, or lateral support.
4. AWP reporting system.
5. XE7, XE8.

429 – 1. Calendar and operational items.
2. On the first workday following the first day of each month preceding the month that the parts are needed.
3. 3; repair cycle support section.
4. AU, BU, or CU.
5. Daily document register (D04).
6. TIN with action taken code B and the MICAP due-out document number.

430 – 1. AFLC SM/IM.
2. TCTO monitor notifies the issuing ALC, IM/SM, by telephone, message, or letter.
3. AF Form 2001.
4. Inspection section.
5. By a K in the fifth position of the stock number.
6. Either separate AF Forms for each kit needed or one AF Form 2005 for the total quantity.
7. TCTO kit monitor.
8. Notice to bin and TCTO kit asset availability notice (I029).
9. Upon receipt of an AF Form 2001.
10. Stored as end items by the repair cycle support section.
11. At least once each calendar month.

431 – 1. Demand data on the item record and repair cycle data on the repair cycle record.
2. Reduced base stock levels and incomplete reports from which buy, repair, and distribution decisions are made by AFLC.
3. Production control identification number.
4. DOC input, action taken code and number of repair cycle days.

432 – 1. Base Supply.
2. DIFM, in-use.
3. To load the warehouse location and the followup date of the MDR exhibit.
4. MSI; unserviceable issue.

433 – 1. DZE cards.
2. R29.
3. R26.
4. Q04 and R26.
5. D19.
6. AFRAMS/WRM report code of 5, 7, E, or G.
7. Fill or kill.
8. Monthly.
9. Jointly by Supply and Maintenance; IEX O.

CHAPTER 5

434 – 1. a. Disadvantage.
b. Advantage.
c. Advantage.

435 – 1. XB3.
2. Three.
3. J, R, X, or *.
4. Unit commander and base audiovisual manager.
5. MRA.
6. MAQ.
7. When justified by consumption and the authorized quantity is the unit pack.
8. 30.
9. The supported activity.
10. 2BS.

436 – 1. Weekly walk-through and cycle replenishment.
2. Those flagged with a red indicator.
3. Once every 30 days or more often if necessary.
4. AF Form 465.
5. When more than twice the authorization.

437 – 1. 1BS.
2. BSU, DUO, or DOE cards; DD Form 1348-1 issue document; or I023 or I031 management notices.
3. Issues to type S organizations with extended unit costs over $100, and items with a controlled item code unequal to U.
4. Firm.
5. The existing due-out is adjusted to show the authorized quantity.

438 – 1. HHT and BCRDR.
2. GVIRLA, bench stock input program.
3. Header card for the account being inventoried.
4. HHT emits multiple beeps and a message might appear on the display.
5. B, 3, 4, 6, or space.
6. The images are printed on DD Form 1348-1.

439 – 1. Routine empty bin report, urgent empty bin requirement, and immediate requirement.
2. Routine empty bin reports and urgent empty bin requirements.
3. DPU expedite call-in point.
4. As soon as possible, but within 8 hours.
5. R31, due-out status listing.

440 – 1. Phase I.
2. M04.
3. S03.
4. Bench Stock, Materiel Control, and appropriate shop supervisors.
5. 15 days.
6. Annually; maintenance superintendent.

441 – 1. Substantial in which the change exceeds the square root of the authorized quantity.
2. Request a MRA/MAQ.
3. When there have not been any demands in 180 days or when requested by the organization.
4. Prepare an AF Form 2005 in two copies, attach them to the property, and send them to the receiving section.

442 – 1. Master and organization bench stock listings and bin labels.
2. Colored bin labels.
3. After each semiannual review.

CHAPTER 6

443 – 1. (1) a.
(2) b.
(3) b.
(4) a.
(5) b.
(6) a.
(7) a.
(8) b.

444 – 1. (1) d.
(2) a.
(3) b.
(4) c.
(5) b.
(6) a.
(7) c.
(8) b.

445 – 1. At least quarterly.
2. G.
3. COCESS.
4. BCE Logistics.

446 – 1. Supply and VIMS.
2. 85.
3. Daily.

447 – 1. (1) l.
(2) k.
(3) c.
(4) a.
(5) e.
(6) i.
(7) h.
(8) m.
2. The reparable may be the only source of supply.
3. Cancel the erroneous request.
4. All levels of supervision.

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